614M3
S79b
vol. 2
B

Rufus J. Whittet

PUBLIC HEALTH BULLETIN

ISSUED MONTHLY

BY THE

STATE DEPARTMENT OF HEALTH

OF MASSACHUSETTS

JANUARY, 1915 — Dec 1915

Vol. 2, No. 1 — 11

Entered as Second-class Matter Oct. 26, 1914, at the Post Office at Boston, Mass.,
under the Act of Aug. 24, 1912

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Approved by
The State Board of Publication.

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PUBLIC HEALTH BULLETIN.

REPORT UPON THE WORK OF THE BACTERIOLOGICAL LABORATORY FOR THE MONTH OF JANUARY, 1915.

The following gives the total number of biological products and diagnostic outfits distributed by the bacteriological laboratory of the State Department of Health during the month of January, 1915: —

BIOLOGICAL PRODUCTS.

Diphtheria antitoxin: —	
4,000 units (special for the Boston City Hospital),	1,372 bottles.
3,000 units,	3,767 bottles.
1,500 units,	690 bottles.
750 units,	731 bottles.
Smallpox vaccine,	3,608 tubes.
Typhoid vaccine,	624 ampoules.
Antimeningitis serum,	90 bottles.
Silver nitrate solution,	244 droppers.

DIAGNOSTIC OUTFITS.

Culture tubes,	1,026
Media,	380
Sputum bottles,	351
Widal outfits,	131
Bile outfits,	12
Malaria outfits,	6

The following gives the total number of bacteriological examinations made in the laboratory of the State Department of Health during the month of January, 1915: —

	Number of Examinations.	Positive.		Negative.
		Diagnosis.	Release.	
Diphtheria,	865	84	61	720

	Number of Examinations.	Positive.	Negative.	*Atypical.
Tuberculosis,	205	55	150	
*Typhoid fever (Widal test),	80	13	60	7
Typhoid fever (culture test),	13	–	13	
*Paratyphoid fever,	6	–	4	2
Miscellaneous,	70	–	–	

Total number of examinations made, 1,239.

FOOD AND DRUGS.

The following tables present the results of the laboratory examinations of samples of food and drugs collected during the month of January, 1915: —

The cities and towns in which samples were collected were: Andover, Ayer, Bedford, Boston, Brookline, Cambridge, Clinton, Dracut, Fall River, Fitchburg, Haverhill, Ipswich, Lawrence, Lowell, Lynn, Marlborough, Medford, Needham, New Bedford, Newton, North Attleborough, Pittsfield, Quincy, Rowley, Salem, Westfield, Woburn and Worcester.

Summary of Analyses.

Articles examined.	Number found to be of Good Quality.	Number adulterated or varying from the Legal Standard.	Total.
Butter,	1	–	1
Canned goods,	3	–	3
Cider,	1	5	6
Clam juice,	1	–	1
Cocoa,	1	–	1
Coffee,	–	1	1
Condensed milk,	3	–	3
Condimental sauces,	1	–	1
Confectionery,	6	1	7
Cream,	6	–	6
Cream of tartar,	4	–	4
Drugs,	52	27	79
Fish,	1	1	2
Flavoring extract: —			
Lemon,	6	5	11
Flour,	2	–	2
Honey,	3	–	3
Horse-radish,	1	–	1
Jams and jellies,	8	1	9
Lard,	–	1	1
Maple syrup	1	1	2
Meat products: —			
Fowl,[1]	5	2	7
Mince meat,	2	–	2
Sausages,	39	50	89
Milk,	207	57	264
Molasses,	9	5	14
Olive oil,	7	1	8

---

[1] Taken from cold storage.

SUMMARY OF ANALYSES — *Concluded.*

ARTICLES EXAMINED.	Number found to be of Good Quality.	Number adulterated or varying from the Legal Standard.	Total.
Pickles,	1	–	1
Salad dressing,	2	–	2
Scallops,	–	1	1
Shrimp,	4	4	8
Spices,	5	–	5
Syrup,	1	–	1
Vinegar,	2	3	5
Totals,	385	166	551

PROSECUTIONS FOR VIOLATIONS OF THE LAWS RELATING TO FOOD AND DRUGS.

Thirty-three convictions were secured during the month of January, 1915, for the sale of adulterated food and drugs, and for violation of the cold-storage laws, as follows: —

NAME OF DEFENDANT.	Address.	Character of Article sold or Nature of Offence.
Daniel E. Cameron,	Dracut,	Milk (total solids, 11.16).[1, 2]
G. H. Schaefner,	Watertown,	Milk (total solids, 10.36).[1, 2]
G. H. Schaefner, Jr.,	Watertown,	Milk (total solids, 10.36).[1]
Stra Panagakis,	Lynn,	Cider (benzoic acid).
William Gavin,	Woburn,	Lard (compound: not marked).
Michael Gavin,	Stoneham,	Lard (compound: not marked).
W. J. Townsend,	Fitchburg,	Molasses (45 per cent. glucose).[2]
Main Provision Company,	Boston,	Sausage (3.48 per cent. starch).
Joseph W. Kilgore,	Boston,	Spirit of nitrous ether (not U. S. P.).
Charles Raynsford,	Clinton,	Spirit of nitrous ether (not U. S. P.).
W. Allan Hamilton,	Boston,	Spirit of peppermint (not U. S. P.).
A. T. Frost,	Clinton,	Tincture of iodine (not U. S. P.).
Francesco VaLeri,	Lynn,	Cold-storage eggs (not properly marked).
H. Castelman,	Salem,	Cold-storage eggs (not properly marked).
John Theofeles,	Salem,	Cold-storage eggs (not properly marked).
C. G. Parsons,	Salem,	Cold-storage eggs (not properly marked).
A. Polansky,	Salem,	Cold storage eggs (not properly marked).
Jonathan Walton,	Hingham,	Cold storage eggs (not properly marked).
William S. Leven,	Brookline,	Cold storage eggs (not properly marked).
Francesco VaLeri,	Lynn,	Cold storage sign not displayed.
H. Castelman,	Salem,	Cold storage sign not displayed.
John Theofeles,	Salem,	Cold storage sign not displayed.
C. G. Parsons,	Salem,	Cold storage sign not displayed.
A. Polansky,	Salem,	Cold storage sign not displayed.
A. K. Morse,	Salem,	Cold storage sign not displayed.
A. C. Williams,	Salem,	Cold storage sign not displayed.
Atwood L. Ford,	Quincy,	Cold storage sign not displayed.
Sophia M. Orcutt,	Quincy,	Cold storage sign not displayed.
Ida Alfred,	Lynn,	Cold storage sign not displayed.
Jonathan Walton	Hingham,	Cold storage sign not displayed.
Carmelo Puleo,	Brookline,	Cold storage sign not displayed.
Frank L. Perkins,	Brookline,	Cold storage sign not displayed.
Samuel F. Blanchard,	Brookline,	Cold storage sign not displayed.

[1] Watered.

[2] Appealed.

Fines imposed, $372.

QUARTERLY REPORT ON THE BUSINESS OF SLAUGHTERING AND MEAT INSPECTION FOR THE MONTHS OF OCTOBER, NOVEMBER AND DECEMBER, 1914.

During the interval between Oct. 1, 1914, and Dec. 31, 1914, the reports of the inspectors of slaughtering in cities and towns in the State give a total of 48,018 carcasses of meat inspected. Of this number, 47,521 passed inspection and 497 were condemned as being unfit for food purposes.

The carcasses condemned were 145 cattle, 186 calves, 160 hogs and 6 sheep. There were 131 carcasses of cattle condemned, being affected with tuberculosis; 151 calves were condemned on account of immaturity; 71 hogs were condemned, being affected with hog cholera and 51 with tuberculosis. The other reasons for condemnation include various pathological conditions found in the carcasses of the different animals; also, for violations of the law relative to the inspection and stamping of carcasses of meat.

The condemned carcasses were disposed of as follows: 319 by rendering, 144 by burying, and 34 disposed of other than for food purposes.

During the month of January, 1915, the following confiscations were made: —

Date.	ARTICLES.	Weight (Pounds).	Reasons.	Disposition.
Jan. 1, 1915	Beef, . .	280	Uninspected and unstamped,	Rendered.
Jan. 18, 1915	Beef, . .	385	Emaciated and unstamped, .	Rendered.

ARTICLES PLACED IN COLD STORAGE DURING THE MONTHS OF OCTOBER, NOVEMBER AND DECEMBER, 1914.

ARTICLES.	Cases.	Dozens.	Packages.	Pounds.
Eggs, case, ...	18,164	544,920	–	–
Eggs, broken, . . .	–	–	564	175,703
Butter, ...	22	–	52,306	2,795,183
Poultry, ...	440	10	9,312	8,048,598¾
Game, ...	–	452⅓	875	31,529
Meat, fresh, ...	156	–	11,667	8,416,137½
Meat products, fresh (except in process of manufacture).	602	–	5,082	831,387
Fish, fresh food, . . .	1,300	–	13	4,314,058
Totals, ...	20,684	545,382⅓	79,819	24,612,596¼

BUTTER AND EGGS HELD IN COLD STORAGE JAN. 1, 1915.

ARTICLES.	Cases.	Dozens.	Packages.	Pounds.
Eggs, case,	511,764	15,362,878½	–	–
Eggs, broken,	–	–	438	28,636
Butter,	–	–	434,249	24,979,386
Totals,	511,764	15,362,878½	434,687	25,008,022

ARTICLES IN COLD STORAGE CONDEMNED, UPON PHYSICAL AND CHEMICAL EXAMINATIONS, AS UNFIT FOR FOOD.

Date.	ARTICLES.	Weight (Pounds).	Reasons.	Disposition.
Jan. 9, 1915	Fowl,	220	Decomposed,	Rendered.
Jan. 12, 1915	Chicken, calves' livers and lamb kidneys,	6	Decomposed,	Incinerated.
Jan. 12, 1915	Beef tenderloins,	63	Soiled and dried.	Incinerated.
Jan. 12, 1915	Mutton,	85	Soiled and dried.	Incinerated.
Jan. 14, 1915	Chickens,	11	Decomposed,	Incinerated.
Jan. 23, 1915	Miscellaneous fish,	940	Soiled,	Buried at sea.
Jan. 25, 1915	Lobster meat,	80	Tainted,	Rendered.
Total,		1,405		

SAMPLES OF FOOD WHICH UPON EXAMINATION WERE FOUND TO BE ADULTERATED.

CIDER.

Contained Benzoic Acid.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
26354	Stra Panagakis, Lynn.	
9631-S	Italian Fruit Store, Wollaston.	
9625-S	Wollaston Public Market, Wollaston.	

Contained Salicylic Acid.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
9617-S	Crothers and Sieders, Wollaston.	

Contained Benzoic and Salicylic Acid.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
9657-S	J. G. Salchow, Wollaston,	D. E. Mowry Company, Milford.

COFFEE.

Contained 20 Per Cent. Chicory; indistinctly labeled.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
26372	Front Street Market, Worcester.	

SAMPLES OF FOOD WHICH UPON EXAMINATION WERE FOUND TO BE ADULTERATED — *Continued.*

FISH (SALMON STEAK).

Decomposed.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
9767-S	Saunders Market, Lowell.	

JELLY.

Contained Benzoic Acid.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
9773-S	Flynn's Market, Lowell, ...	Strawberry. Mansfield, Whitman & Co.

LARD.

Compound: not marked as Such.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
9563-S	Simon Jegelwicz, Westfield.	

LEMON EXTRACT.

Contained Less than 5 Per Cent. Lemon Oil.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
26517[1]	Hatton Bros. & Johnson, Lynn.	
26511[2,3]	Manhattan Market, Cambridge.	
26437[4]	Saunder's Market, Lowell, ...	Reliable Specialty Company, Franklin Park, Mass.
26445[2,5]	Variety Store, 7 Thorndike Street, Lowell, . .	Paris Chemical Company, Lowell.
26613[2,6]	J. J. Walsh, Lawrence.	

MAPLE SYRUP.

Contained 85 Per Cent. Cane Sugar.[7]

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
9565-S	Gilbert West & Son, Pittsfield, ...	Golden Tree. New England Maple Syrup Company.

MOLASSES.

Contained 26 Per Cent. Glucose.[7]

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
q 15138	Atlantic & Pacific Tea Company, Marlborough, .	Vesmar.

Contained 30 Per Cent. Glucose.[7]

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
q 15144	Atlantic & Pacific Tea Company, Gardner, . .	Vesmar.

Contained 36 Per Cent. Glucose.[7]

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
q 15131	Atlantic & Pacific Tea Company, Brookline, .	B. & O.

Contained 43 Per Cent. Glucose.[7]

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
q 15147	Atlantic & Pacific Tea Company, Fitchburg, .	B. & O.

Contained 44 Per Cent. Glucose.[7]

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
q 15145	Atlantic & Pacific Tea Company, Gardner, . .	B. & O.

[1] Contained 2 per cent. lemon oil.
[2] Not up to professed standard.
[3] Contained 0.4 per cent. lemon oil; labeled 3 per cent.
[4] Contained 1.5 per cent. lemon oil.
[5] Contained no lemon oil; labeled 3 per cent.
[6] Contained 0.4 per cent. lemon oil; labeled 2 per cent.
[7] Per cent. of ingredients not stated on label.

SAMPLES OF FOOD WHICH UPON EXAMINATION WERE FOUND TO BE ADULTERATED — *Continued.*

OLIVE OIL.

Contained 40 Per Cent. Cottonseed Oil.

Number of Sample.	Dealer.	Brand, Wholesaler or Manufacturer.
26550	Fruit Store, 86 [Main Street, North Attleborough.	

SAUSAGES.

Contained Coloring Matter.

Number of Sample.	Dealer.	Brand, Wholesaler or Manufacturer.
26329	Bay State Market, New Bedford.	
9747–S	William F. Butler, Haverhill.	
26399	Consolidated Store, New Bedford.	
26464	Furneaux, Lawrence.	
9727–S	E. E. Gray Company, Boston,	C. A. W.
26455	Jefferson Market, Fall River.	
26450	Jucotte & Co., Fall River.	
26451	Jucotte & Co., Fall River.	
26328	Kierchler & Co., New Bedford.	
26474	Edward Lanouette, Lawrence.	
9729–S	J. H. Wheeler Company, Boston,	C. A. W.

Contained More than 2 Per Cent. Starch.

Number of Sample.	Dealer.	Brand, Wholesaler or Manufacturer.
26329	Bay State Market, New Bedford.	
26330	Bay State Market, New Bedford.	
26405	Bay State Packing Company, Boston.	
26406	Bay State Packing Company, Boston.	
26407	Bay State Packing Company, Boston.	
9747–S	William F. Butler, Haverhill.	
9749–S	William F. Butler, Haverhill.	
26333	J. Chausa, New Bedford.	
26334	J. Chausa, New Bedford.	
26399	Consolidated Store, New Bedford.	
26499	William Crossley, Fall River.	
26501	William Crossley, Fall River.	
26331	J. Davidson & Son, New Bedford.	
9775–S	F. Dostalter, Lowell,	Roussell.
26465	Furneaux, Lawrence.	
26502	Globe Provision Company, Fall River.	
26503	Globe Provision Company, Fall River.	
26504	Globe Provision Company, Fall River.	
9727–S	E. E. Gray Company, Boston,	C. A. W.
9691–S	Arthur Greenwood, Lowell.	
26461	John Holt, Lawrence.	
26462	John Holt, Lawrence.	
26463	John Holt, Lawrence.	
26455	Jefferson Market, Fall River.	
9561–S	Simon Jegelwicz, Westfield.	
26328	Kierchler & Co., New Bedford.	
9795–S	Eugene LaBrie, Fall River,	Kustler, New Bedford.
26473	Edward Lanouette, Lawrence.	
26610	Richard Leigh, Lawrence.	
26611	Richard Leigh, Lawrence.	
q 15155	Main Provision Company, Boston,	Bay State Sausage Company.
9697–S	Parks Sausage and Provision Company, Boston.	
q 15150	Public Cash Market, Lynn,	Main Provision Company.
26507	John C. Richardson, Fall River.	
26327	J. H. Schmidt, New Bedford.	
26452	Sonderman's Market, Fall River.	
26479	J. Singlsby, Lawrence.	
9729–S	J. H. Wheeler Company, Boston,	C. A. W.
26396	Arthur Wild, New Bedford.	
26397	Arthur Wild, New Bedford.	
26468	T. Wilkinson, Lawrence.	
26469	T. Wilkinson, Lawrence.	
26470	T. Wilkinson, Lawrence.	

SAMPLES OF FOOD WHICH UPON EXAMINATION WERE FOUND TO BE ADULTERATED — *Concluded.*

SCALLOPS.

Watered.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
9813-S	M. Foley, Boston.	
	SHRIMP. *Contained Borax.*	
26480	Barlow's Market, Lowell.	
26590	Gove & Mollins, Boston.	
26608	Gove & Mollins, Boston.	
	Decomposed.	
9817-S	Boston & New York Fish Company, Boston.	
	CIDER VINEGAR. *Low in Acid (4.44 Per Cent.) and Solids (1.40 Per Cent.).*	
26456	F. S. Sonderman, Fall River,	G. W. Simmons, Fall River.

SAMPLES OF DRUGS WHICH UPON EXAMINATION WERE FOUND TO BE ADULTERATED.

ALCOHOL.

Number of Sample.	DEALER.	Wholesaler or Manufacturer.	Per Cent. of Required Strength.
26377	Heffernan & Co., Worcester,	– –	82.19
	SPIRIT OF ANISE.		
q 15141	O. A. Gould, Gardner,	– –	69
q 15143	L. Emile Robillard, Gardner,	– –	70
	SPIRIT OF CAMPHOR.		
9549-S	George E. Judson, Westfield,	– –	50
	SPIRIT OF NITROUS ETHER.		
9647-S	Boston & Maine Pharmacy, Salem,	– –	58
9761-S	Daniel J. Cavan, Salem,	– –	71
9731-S	George E. Crane, Haverhill,	– –	65
q 15142	Crystal Drug Company, Inc., Gardner,	– –	40
26394	Davis & Hatch, New Bedford,	– –	24
9651-S	John E. Heffernan, Salem,	– –	68
9759-S	John E. Heffernan, Salem,	– –	57
9645-S	Liggett's, Salem,	– –	53
9655-S	Liggett's, Boston,	– –	78
9789-S	Thomas H. Nabb, Fall River,	– –	50
9735-S	Charles A. Nelson, Haverhill,	– –	67
q 15140	Henry H. Parkis, Gardner,	– –	77
9633-S	Shepard Norwell Company, Boston,	– –	70
9811-S	Shepard Norwell Company, Boston,	– –	83
9785-S	Richard E. Walsh, Fall River,	– –	83

SAMPLES OF DRUGS WHICH UPON EXAMINATION WERE FOUND TO BE ADULTERATED — *Concluded.*

SPIRIT OF PEPPERMINT.

Number of Sample.	DEALER.	Wholesaler or Manufacturer.	Per Cent. of Required Strength.
26523	A. M. Bailey, Lynn, ...	– –	84
26564	Rose E. Rourke, Lowell, ...	– –	50
9787–S	Charles St. George, Fall River, ...	– –	22
26442	Variety Store, 289 Thorndike Street, Lowell, .	– –	50
26612[1]	J. J. Walsh, Lawrence, ...	– –	–

[1] Incorrectly labeled.

SAMPLES OF MILK WHICH UPON EXAMINATION WERE FOUND TO BE ADULTERATED.

Number of Sample.	Name of Dealer, Wholesaler or Producer.	Results of Analyses.
26395	T. David, New Bedford. . . .	Total solids, 11.38 per cent.; fat, 2.15 per cent.; proteins, 3.46 per cent.; skimmed milk.
26384	L. Levasseur, New Bedford, . . .	Total solids, 12.14 per cent.; fat, 3.10 per cent.; proteins, 3.49 per cent.; skimmed milk.
26392	A. D. Lupo, New Bedford, . . .	Total solids, 10.34 per cent.; fat, 1.60 per cent.; proteins, 3.23 per cent.; skimmed milk.
q 15160	Emery C. Willard, Ashby, . . .	Total solids, 9.86 per cent.; fat, 3.10 per cent.; contained added water.
q 15164	Emery C. Willard, Ashby, . . .	Total solids, 11.06 per cent.; fat, 3.30 per cent.; contained added water.

REPORT ON INSPECTION OF DAIRIES.

Owing to the continuance of foot and mouth disease among cattle in a number of towns in the State, the regular inspection of dairies was not resumed during the month of January, 1915.

RETURNS OF DISEASES.

Cases of Diseases declared by the State Department of Health to be Dangerous to the Public Health.

[Under the provisions of section 52 of chapter 75 of the Revised Laws.]

DISEASE.	Week ending —					
	Jan. 2.	Jan. 9.	Jan. 16.	Jan. 23.	Jan. 30.	Total.
Actinomycosis,	–	–	–	1	–	1
Anterior poliomyelitis,	–	2	1	2	–	5
Anthrax,	–	–	–	–	1	1
Cerebro-spinal meningitis,	3	4	3	2	4	16
Chicken-pox,	176	273	251	248	218	1,166
Diphtheria,	177	184	163	211	186	921
Dog bite,	2	–	–	3	–	5
German measles,	3	3	4	1	8	19
Glanders,	1	–	–	–	–	1
Infectious diseases of the eye: —						
(*a*) Ophthalmia neonatorum,	48	30	62	62	60	262
(*b*) Suppurative conjunctivitis,	2	2	–	3	1	8
(*c*) Trachoma,	1	1	1	–	1	4
Measles,	206	244	205	256	207	1,118
Mumps,	31	21	62	49	40	203
Pellagra,	–	–	1	–	–	1
Rabies,	–	–	–	–	1	1
Scarlet fever,	181	202	192	189	189	953
Septic sore throat,	3	9	4	7	8	31
Smallpox,	1	–	–	–	–	1
Tetanus,	2	1	1	1	1	6
Tuberculosis, pulmonary,	120	132	131	152	145	680
Tuberculosis, other forms,	7	3	5	3	10	28
Tuberculosis, meningitis,	6	7	4	4	3	24
Typhoid fever,	41	32	16	24	23	136
Whooping cough,	92	89	88	158	118	545

RETURNS OF DEATHS.

WEEKLY RETURNS OF DEATHS FROM DISEASES DECLARED BY THE STATE DEPARTMENT OF HEALTH TO BE DANGEROUS TO THE PUBLIC HEALTH IN CITIES AND TOWNS IN MASSACHUSETTS.

[Under the provisions of chapter 210, Acts of 1913.]

Week ending Jan. 2, 1915.

CITIES AND TOWNS.	Population. Census for 1910.	Actinomycosis.	Anterior Poliomyelitis.	Cerebro-spinal Meningitis.	Diphtheria.	Measles.	Scarlet Fever.	Tetanus.	Tuberculosis, Pulmonary (or not classified).	Tuberculosis, Other Forms.	Typhoid Fever.	Whooping Cough.	Ophthalmia Neonatorum.	Chicken-pox.	Hydrophobia.
Boston,	686,092	–	–	1	4	–	1	–	26[1]	5[2]	2	–	–	–	–
Worcester,	145,986	–	–	–	–	–	–	–	6	2	–	–	–	–	–
Fall River,	119,295	–	–	–	–	–	–	–	2	–	–	–	–	–	–
Lowell,	106,294	–	–	2	2	–	–	–	1	–	–	–	–	–	–
Cambridge,	104,839	–	–	–	–	–	–	–	5	–	–	–	–	–	–
New Bedford,	96,652	–	–	–	–	–	–	1	1	2	–	1	–	–	–
Lynn,	89,336	–	–	–	–	–	–	–	1	2	–	–	–	–	–
Springfield,	88,926	–	–	–	–	–	–	–	3	1	–	–	–	–	–
Lawrence,	85,892	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Somerville,	77,236	–	–	–	1	–	1	–	–	2	–	–	–	–	–
Holyoke,	57,730	–	–	–	–	–	–	–	1	1	–	–	–	–	–
Brockton,	56,878	–	–	–	–	–	–	–	–	3	–	–	–	–	–
Malden,	44,404	–	–	–	–	–	–	–	2	–	–	–	–	–	–
Haverhill,	44,115	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Salem,	43,697	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Newton,	39,806	–	–	–	–	–	–	–	2	–	–	–	–	–	–
Fitchburg,	37,826	–	–	–	1	–	–	–	2	–	–	–	–	–	–
Taunton,	34,259	–	–	–	–	–	–	–	3	–	–	–	–	–	–
Everett,	33,484	–	–	–	1	–	1	–	3	–	–	–	–	–	–
Quincy,	32,642	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Chelsea,	32,452	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Pittsfield,	32,121	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Waltham,	27,834	–	–	–	–	–	–	–	–	–	–	–	–	–	–

[1] Two nonresidents.

[2] One nonresident.

Week ending Jan. 2, 1915 — Concluded.

CITIES AND TOWNS.	Population, Census for 1910.	Actinomycosis.	Anterior Poliomyelitis.	Cerebro-spinal Meningitis.	Diphtheria.	Measles.	Scarlet Fever.	Tetanus.	Tuberculosis, Pulmonary (or not classified).	Tuberculosis, Other Forms.	Typhoid Fever.	Whooping Cough.	Ophthalmia Neonatorum.	Chicken-pox.	Hydrophobia.
Brookline,	27,792	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Chicopee,	25,401	–	–	–	–	–	–	–	3	–	–	–	–	–	–
Gloucester,	24,398	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Medford,	23,150	–	–	–	–	–	–	–	1	–	–	–	–	–	–
North Adams,	22,019	–	–	–	–	–	–	–	–	1	–	–	–	–	–
Northampton,	19,431	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Beverly,	18,650	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Revere,	18,219	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Leominster,	17,580	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Attleboro,	16,215	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Westfield,	16,044	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Peabody,	15,721	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Melrose,	15,715	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Woburn,	15,308	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Newburyport,	14,949	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Gardner,	14,699	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Marlborough,	14,579	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Clinton,	13,075	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Milford,	13,055	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Adams,	13,026	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Framingham,	12,948	–	–	–	–	–	–	–	–	–	1	–	–	–	–
Weymouth,	12,895	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Watertown,	12,875	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Southbridge,	12,592	–	–	–	–	–	–	–	1	–	–	–	–	–	–
Plymouth,	12,141	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Webster,	11,509	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Methuen,	11,448	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Wakefield,	11,404	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Arlington,	11,187	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Greenfield,	10,427	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Winthrop,	10,132	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Total of reporting cities and towns of more than 10,000 population,	1,915,153	–	–	3	9	–	3	1	63	19	3	1	–	–	–

North Attleborough,	9,562	–	–	–	–	–	–	–	–	–	1	–	–	–	–
Norwood,	8,014	–	–	–	–	–	–	–	1	–	–	–	–	–	–
Stoneham,	7,090	–	–	–	–	–	–	–	1	–	–	–	–	–	–
Blackstone,	5,648	–	–	–	–	–	–	–	1	–	–	–	–	–	–
Belmont,	5,542	–	–	–	1	–	–	–	–	1	–	–	–	–	–
Provincetown,	4,369	–	–	–	–	–	–	–	1	–	–	–	–	–	–
Douglas,	2,152	–	–	–	–	–	–	–	1	–	–	–	–	–	–
Rehoboth,	2,001	–	–	–	1	–	–	–	–	–	–	–	–	–	–
Total of reporting towns of less than 10,000 population,	44,378	–	–	–	2	–	–	–	5	1	1	–	–	–	–

Week ending Jan. 9, 1915.

CITIES AND TOWNS.	Population. Census for 1910.	Actinomycosis.	Anterior Poliomyelitis.	Cerebro-spinal Meningitis.	Diphtheria.	Measles.	Scarlet Fever.	Tetanus.	Tuberculosis, Pulmonary (or not classified).	Tuberculosis, Other Forms.	Typhoid Fever.	Whooping Cough.	Ophthalmia Neonatorum.	Chicken-pox.	Hydrophobia.
Boston,	686,092	–	–	–	7[1]	–	1	–	31[2]	5	1	1	–	–	–
Worcester,	145,986	–	–	1	–	–	–	–	5	–	–	–	–	–	–
Fall River,	119,295	–	–	–	2	–	–	–	4	–	–	–	–	–	–
Lowell,	106,294	–	–	2	–	–	–	–	2	–	–	–	–	–	–
Cambridge,	104,839	–	–	–	1	–	–	–	3	–	–	–	–	–	–
New Bedford,	96,652	–	–	–	1	–	–	–	4	–	2	–	–	–	–
Lynn,	89,336	–	–	–	1	–	–	–	2	–	–	–	–	–	–
Springfield,	88,926	–	–	–	–	–	–	–	1	–	1	–	–	–	–
Lawrence,	85,892	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Somerville,	77,236	–	–	–	1	1	–	–	2	–	–	–	–	–	–
Holyoke,	57,730	–	–	–	1	–	–	–	–	–	–	–	–	–	–
Brockton,	56,878	–	–	1	–	–	–	–	1	–	–	–	–	–	–
Malden,	44,404	–	–	–	–	–	–	–	1	–	–	–	–	–	–
Haverhill,	44,115	–	–	–	–	–	–	–	1	2	–	–	–	–	–
Salem,	43,697	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Newton,	39,806	–	–	–	–	–	–	–	1	1	–	–	–	–	–
Fitchburg,	37,826	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Taunton,	34,259	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Everett,	33,484	–	–	–	–	–	–	–	–	1	–	–	–	–	–
Quincy,	32,642	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Chelsea,	32,452	–	–	–	–	–	–	–	1	–	–	–	–	–	–
Pittsfield,	32,121	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Waltham,	27,834	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Brookline,	27,792	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Chicopee,	25,401	–	–	–	–	–	1	–	1	–	–	–	–	–	–
Gloucester,	24,398	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Medford,	23,150	–	–	–	–	–	1	–	–	–	–	–	–	–	–
North Adams,	22,019	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Northampton,	19,431	–	–	–	–	–	–	–	1	–	–	–	–	–	–
Beverly,	18,650	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Revere,	18,219	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Leominster,	17,580	–	–	–	–	–	–	–	–	–	–	–	–	–	–

Attleboro,	16,215	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Westfield,	16,044	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Peabody,	15,721	–	–	–	–	–	–	–	–	1	–	–	–	–	–
Melrose,	15,715	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Woburn,	15,308	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Newburyport,	14,949	–	–	–	–	–	–	–	1	–	–	–	–	–	–
Gardner,	14,699	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Marlborough,	14,579	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Clinton,	13,075	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Milford,	13,055	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Adams,	13,026	–	–	–	–	–	–	–	2	–	–	–	–	–	–
Framingham,	12,948	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Weymouth,	12,895	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Watertown,	12,875	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Southbridge,	12,592	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Plymouth,	12,141	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Webster,	11,509	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Methuen,	11,448	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Wakefield,	11,404	–	–	–	–	–	–	–	1	–	–	–	–	–	–
Arlington,	11,187	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Greenfield,	10,427	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Winthrop,	10,132	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Total of reporting cities and towns of more than 10,000 population,	1,946,607	–	–	4	14	1	3	–	65	10	4	1	–	–	–
Winchester,	9,309	–	–	–	–	–	–	–	1	–	–	–	–	–	–
Saugus,	8,047	–	–	–	–	–	–	–	1	–	–	–	–	–	–
Franklin,	5,641	–	–	–	–	–	–	–	1	–	–	–	–	–	–
Millbury,	4,740	–	–	–	–	–	–	–	1	–	–	–	–	–	–
Rockport,	4,211	–	–	–	–	–	–	–	1	–	–	–	–	–	–
Total of reporting towns of less than 10,000 population,	31,948	–	–	–	–	–	–	–	5	–	–	–	–	–	–

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[1] One nonresident.

[2] Six nonresidents.

Week ending Jan. 16, 1915.

CITIES AND TOWNS.	Population. Census for 1910.	Actinomycosis.	Anterior Poliomyelitis.	Cerebro-spinal Meningitis.	Diphtheria.	Measles.	Scarlet Fever.	Tetanus.	Tuberculosis, Pulmonary (or not classified).	Tuberculosis, Other Forms.	Typhoid Fever.	Whooping Cough.	Ophthalmia Neonatorum.	Chicken-pox.	Hydrophobia.
Boston,	686,092	–	–	2	4[1]	–	2	–	21[2]	5[3]	–	–	2[3]	–	–
Worcester,	145,986	–	–	–	–	–	1	–	2	–	1	–	–	–	–
Fall River,	119,295	–	–	–	–	2	1	–	–	–	–	–	–	–	–
Lowell,	106,294	–	–	–	–	–	–	–	–	2	–	–	–	–	–
Cambridge,	104,839	–	–	–	–	–	–	–	6	–	–	–	–	1	–
New Bedford,	96,652	–	–	–	1	–	–	–	1	–	–	–	–	–	–
Lynn,	89,336	–	–	–	1	–	–	–	1	–	–	–	–	–	–
Springfield,	88,926	1	–	–	–	–	–	–	–	–	–	–	–	–	–
Lawrence,	85,892	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Somerville,	77,236	–	–	–	–	1	–	–	1	–	–	–	–	–	–
Holyoke,	57,730	–	–	–	–	–	–	–	4	–	–	–	–	–	–
Brockton,	56,878	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Malden,	44,404	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Haverhill,	44,115	–	1	–	–	–	–	–	2	–	–	–	–	–	–
Salem,	43,697	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Newton,	39,806	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Fitchburg,	37,826	–	–	–	–	–	–	–	1	–	–	–	–	–	–
Taunton,	34,259	–	–	–	–	–	–	–	–	1	–	–	–	–	–
Everett,	33,484	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Quincy,	32,642	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Chelsea,	32,452	–	–	–	–	–	–	–	2	–	–	–	–	–	–
Pittsfield,	32,121	–	–	–	–	–	–	–	4	–	–	–	–	–	–
Waltham,	27,834	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Brookline,	27,792	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Chicopee,	25,401	–	–	–	2	–	–	–	2	–	–	–	–	–	–
Gloucester,	24,398	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Medford,	23,150	–	–	–	–	–	–	–	–	–	–	–	–	–	–
North Adams,	22,019	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Northampton,	19,431	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Beverly,	18,650	–	–	–	–	–	–	–	1	–	–	–	–	–	–
Revere,	18,219	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Leominster,	17,580	–	–	–	–	–	–	–	–	–	–	–	–	–	–

Attleboro,	16,215	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Westfield,	16,044	–	–	–	–	–	–	–	5[3]	–	–	–	–	–	–
Peabody,	15,721	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Melrose,	15,715	–	–	–	–	–	–	–	1	–	–	–	–	–	–
Woburn,	15,308	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Newburyport,	14,949	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Gardner,	14,699	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Marlborough,	14,579	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Clinton,	13,075	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Milford,	13,055	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Adams,	13,026	–	–	–	–	–	–	–	–	1	–	–	–	–	–
Framingham,	12,948	–	–	–	–	–	–	–	–	–	–	1	–	–	–
Weymouth,	12,895	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Watertown,	12,875	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Southbridge,	12,592	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Plymouth,	12,141	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Webster,	11,509	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Methuen,	11,448	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Wakefield,	11,404	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Arlington,	11,187	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Greenfield,	10,427	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Winthrop,	10,132	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Total of reporting cities and towns of more than 10,000 population,	1,855,213	1	1	2	8	3	4	–	54	9	1	1	2	1	–
Maynard,	6,390	–	–	–	–	–	–	–	1	–	–	–	–	–	–
Shutesbury,	267	–	–	–	–	–	–	–	1	–	–	–	–	–	–
Total of reporting towns of less than 10,000 population,	6,657	–	–	–	–	–	–	–	2	–	–	–	–	–	–

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[1] One nonresident.

[2] Four nonresidents.

[3] Two nonresidents.

Week ending Jan. 23, 1915.

CITIES AND TOWNS.	Population. Census for 1910.	Actinomycosis.	Anterior Poliomyelitis.	Cerebro-spinal Meningitis.	Diphtheria.	Measles.	Scarlet Fever.	Tetanus.	Tuberculosis, Pulmonary (or not classified).	Tuberculosis, Other Forms.	Typhoid Fever.	Whooping Cough.	Ophthalmia Neonatorum.	Chicken-pox.	Hydrophobia.
Boston,	686,092	1	–	–	1	–	1[1]	1	17	4[2]	–	1	–	–	–
Worcester,	145,986	–	–	–	–	–	–	–	3	1	1	–	–	–	–
Fall River,	119,295	–	–	–	1	–	–	–	1	–	–	–	–	–	–
Lowell,	106,294	–	–	–	–	–	–	–	1	–	–	–	–	–	–
Cambridge,	104,839	–	–	–	–	–	1	–	2	–	–	–	–	–	–
New Bedford,	96,652	–	–	–	1	–	1	–	7	1	4	–	–	–	–
Lynn,	89,336	–	–	–	1	–	–	–	–	–	–	–	–	–	–
Springfield,	88,926	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Lawrence,	85,892	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Somerville,	77,236	–	–	–	2	–	–	–	1	1	1	–	–	–	–
Holyoke,	57,730	–	–	–	2	–	–	–	3	1	–	–	–	–	–
Brockton,	56,878	–	–	–	1	–	–	–	1	–	–	–	–	–	–
Malden,	44,404	–	–	–	–	–	–	–	1	–	–	–	–	–	–
Haverhill,	44,115	–	–	–	–	–	–	–	1	–	–	–	–	–	–
Salem,	43,697	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Newton,	39,806	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Fitchburg,	37,826	–	–	–	1	–	–	–	–	–	–	–	–	–	–
Taunton,	34,259	–	–	–	–	–	–	–	1	–	–	1	–	–	–
Everett,	33,484	–	–	–	–	–	–	–	2	–	–	–	–	–	–
Quincy,	32,642	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Chelsea,	32,452	–	–	–	–	–	–	–	2	–	–	–	–	–	–
Pittsfield,	32,121	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Waltham,	27,834	–	–	–	–	–	–	–	2	–	–	–	–	–	–
Brookline,	27,792	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Chicopee,	25,401	–	–	–	–	–	–	–	1	–	–	1	–	–	–
Gloucester,	24,398	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Medford,	23,150	–	–	–	–	–	–	–	–	1	–	–	–	–	–
North Adams,	22,019	–	–	–	1	–	–	–	–	–	–	–	–	–	–
Northampton,	19,431	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Beverly,	18,650	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Revere,	18,219	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Leominster,	17,580	–	–	–	–	–	–	–	–	–	–	–	–	–	–

Attleboro,	16,215	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Westfield,	16,044	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Peabody,	15,721	–	–	–	1	–	–	–	–	–	–	–	–	–	–
Melrose,	15,715	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Woburn,	15,308	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Newburyport,	14,949	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Gardner,	14,699	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Marlborough,	14,579	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Clinton,	13,075	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Milford,	13,055	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Adams,	13,026	–	–	–	–	–	–	–	1	2	–	–	–	–	–
Framingham,	12,948	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Weymouth,	12,895	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Watertown,	12,875	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Southbridge,	12,592	–	–	–	1	–	–	–	1	–	–	–	–	–	–
Plymouth,	12,141	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Webster,	11,509	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Methuen,	11,448	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Wakefield,	11,404	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Arlington,	11,187	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Greenfield,	10,427	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Winthrop,	10,132	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Total of reporting cities and towns of more than 10,000 population,	1,906,621	1	–	–	13	–	3	1	48	11	6	3	–	–	–
Bridgewater,	7,688	–	–	–	–	–	–	–	1	–	–	–	–	–	–
Spencer,	6,740	–	–	–	–	–	–	–	2	[1]1	–	–	–	–	–
Winchendon,	5,678	–	–	–	1	–	–	–	–	–	–	–	–	–	–
Blackstone,	5,648	–	–	–	–	–	–	–	–	1	–	–	–	–	–
Millbury,	4,740	–	–	–	–	–	1	–	–	–	–	–	–	–	–
Dudley,	4,267	–	–	–	–	–		–	1	–	–	–	–	–	–
Dalton,	3,568	–	–	–	–	–	–	–	1	–	–	–	–	–	–
Tisbury,	1,196	–	–	–	–	–	1	–	–	–	–	–	–	–	–
Total of reporting towns of less than 10,000 population,	39,525	–	–	–	1	–	2	–	5	2	–	–	–	–	–

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[1] One nonresident.

[2] Two nonresidents.

Week ending Jan. 30, 1915.

CITIES AND TOWNS.	Population. Census for 1910.	Actinomycosis.	Anterior Poliomyelitis.	Cerebro-spinal Meningitis.	Diphtheria.	Measles.	Scarlet Fever.	Tetanus.	Tuberculosis, Pulmonary (or not classified).	Tuberculosis, Other Forms.	Typhoid Fever.	Whooping Cough.	Ophthalmia Neonatorum.	Chicken-pox.	Hydrophobia.
Boston,	686,092	–	–	1[1]	2	1	1	–	27[1]	5[2]	–	–	–	–	–
Worcester,	145,986	–	–	–	–	–	–	–	2	3	–	1	–	–	–
Fall River,	119,295	–	–	–	–	2	–	–	1	3	–	1	–	–	–
Lowell,	106,294	–	–	–	2	–	–	–	2	1	–	1	–	–	–
Cambridge,	104,839	–	–	–	–	–	–	–	3	1	–	–	–	–	–
New Bedford,	96,652	–	–	–	–	–	–	–	3	–	–	–	–	–	–
Lynn,	89,336	–	–	–	1	–	–	–	4	–	–	–	–	–	–
Springfield,	88,926	–	–	–	–	–	–	–	2	1	–	–	–	–	–
Lawrence,	85,892	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Somerville,	77,236	–	–	–	–	–	–	–	1	1	–	–	–	–	–
Holyoke,	57,730	–	–	–	–	–	–	–	–	–	–	1	–	–	–
Brockton,	56,878	–	–	–	–	–	–	–	2	1	–	–	–	–	–
Malden,	44,404	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Haverhill,	44,115	–	–	–	–	–	–	–	2	–	–	–	–	–	–
Salem,	43,697	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Newton,	39,806	–	–	–	–	–	–	–	2	–	–	–	–	–	–
Fitchburg,	37,826	–	–	–	2	–	1	–	1	–	–	–	–	–	–
Taunton,	34,259	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Everett,	33,484	–	–	–	1	–	–	–	–	–	–	–	–	–	–
Quincy,	32,642	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Chelsea,	32,452	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Pittsfield,	32,121	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Waltham,	27,834	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Brookline,	27,792	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Chicopee,	25,401	–	–	–	–	–	–	–	1	1	–	–	–	–	–
Gloucester,	24,398	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Medford,	23,150	–	–	–	–	–	–	–	–	–	–	–	–	–	–
North Adams,	22,019	–	–	–	–	–	–	–	1	–	–	–	–	–	–
Northampton,	19,431	–	–	–	–	–	–	–	1	–	–	–	–	–	–
Beverly,	18,650	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Revere,	18,219	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Leominster,	17,580	–	–	–	–	–	–	–	1	–	–	–	–	–	–

Attleboro,	16,215	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Westfield,	16,044	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Peabody,	15,721	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Melrose,	15,715	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Woburn,	15,308	–	–	–	–	–	–	–	1	–	–	–	–	–	–
Newburyport,	14,949	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Gardner,	14,699	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Marlborough,	14,579	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Clinton,	13,075	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Milford,	13,055	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Adams,	13,026	–	–	–	–	–	–	–	2	–	–	1	–	–	–
Framingham,	12,948	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Weymouth,	12,895	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Watertown,	12,875	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Southbridge,	12,592	–	–	–	–	–	–	–	1	–	–	–	–	–	–
Plymouth,	12,141	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Webster,	11,509	–	–	–	–	–	–	–	1	–	–	–	–	–	–
Methuen,	11,448	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Wakefield,	11,404	–	–	–	1	–	–	–	–	–	–	–	–	–	–
Arlington,	11,187	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Greenfield,	10,427	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Winthrop,	10,132	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Total of reporting cities and towns of more than 10,000 population,	1,832,435	–	–	1	9	3	2	–	61	17	–	5	–	–	–
Easthampton,	8,524	–	–	–	–	–	–	–	1	–	–	–	–	–	–
Stoneham,	7,090	–	–	–	1	–	–	–	–	–	–	–	–	–	–
Dartmouth.	4,378	–	–	–	–	–	–	–	1	–	–	–	–	–	–
Provincetown,	4,369	–	–	–	–	–	–	–	1	–	–	–	–	–	–
Holden,	2,147	–	–	–	–	–	–	–	–	–	–	–	–	–	1
Shirley,	2,139	–	–	–	–	–	–	–	–	1	–	–	–	–	–
Total of reporting towns of less than 10,000 population,	28,647	–	–	–	1	–	–	–	3	1	–	–	–	–	1

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[1] One nonresident.

[2] Three nonresidents.

THE MASSACHUSETTS ASSOCIATION OF BOARDS OF HEALTH.

The State Department of Health takes pleasure in calling to the attention of local boards of health the advantages offered to them by membership in the Massachusetts Association of Boards of Health. This body of health officials and persons interested in preventive medicine was organized in March, 1890, and the free discussions at its meetings held every three months have been a source of help and inspiration to those actively engaged in public health work. The present membership of the association is about 300.

The objects of the association meetings are the advancement of sanitary science in the Commonwealth of Massachusetts, the promotion of better organization of local boards of health, and the uniform enforcement of laws and regulations relating to the preservation and promotion of health. The meetings give an excellent opportunity, also, for local health officials to explain to the State Department of Health problems and the solution of problems before the said Department, thus promoting a better co-operation not only between neighboring communities but between the State Department of Health and the local boards of health.

Each meeting of the association is preceded by a dinner and social hour for the purpose of establishing pleasant social relations among its members, each member bearing the expense of his dinner and that of his guests in addition to the small annual membership fee of $1.

The proceedings of the association appear in the full numbers of the "American Journal of Public Health." Subscription to this journal is $3 per year.

Both the "American Journal of Public Health," issued by the American Public Health Association and the "Public Health Reports," issued weekly by the United States Public Health Service, contain information on all subjects of preventive medicine, including scientific laboratory researches, intensive studies on the prevalence of disease, sanitary legislation and related subjects, and should be in the hands of each public health official in the Commonwealth.

The State Department of Health is co-operating with the Massachusetts Association of Boards of Health to make the April meeting of the association an event in the public health history of the State. Due notice of this important meeting will be sent to all health officials of the State, and it is hoped that each official will take advantage of the opportunity for the co-operation and greater efficiency in public health matters.

NATIONAL CONFERENCE OF CHARITIES AND CORRECTIONS: ABSTRACT FROM PRELIMINARY PROGRAM, ISSUED FEB. 11, 1915, CHICAGO.

Announcement has been made of the preliminary program for the forty-second annual meeting of the National Conference of Charities and Corrections, to be held at Baltimore, Md., May 12–19, 1915. The conference will meet under the presidency of Mrs. John M. Glenn of New York, the second woman president it has ever had.

The program contains the names of more than fifty leading charity workers and penologists, and it is anticipated that the unprecedented social situation of the present year will result in a conference of unique values.

The field of health and hygiene is comprehended in a series of discussions on health topics, under the chairmanship of Dr. Richard C. Cabot of Boston, and of social hygiene, under the chairmanship of Mrs. Martha P. Falconer, superintendent of the State School for Girls at Darling, Pa. Dr. Cabot's program will include an explanation of the newer methods of hospitals in their social service departments, the chief speaker being Dr. William H. Welch of Johns Hopkins Hospital, Baltimore, and a symposium on the social education of the physician, by Mr. Joseph Lee of Boston and Dr. Charles P. Emerson, dean of the medical department of Indiana University, Indianapolis. Mrs. Falconer's program will be addressed to the question, "How shall we suppress Prostitution?" this following previous considerations at the National Conference of the extent of our scientific knowledge of this subject and the proper use of popular educational methods. Dr. Katherine Bement Davis, Commissioner of Correction of New York City, will give "A Survey of Educational Work," and other speakers will treat subjects such as protective league work, prostitution in rural communities and methods of scientific investigation.

The discussion of State care of the insane, feeble-minded and epileptic will occur under the chairmanship of Dr. Walter E. Fernald, superintendent of the Massachusetts School for Feeble-minded at Waverley. It will include answers to the question, "What is Practicable in the Way of Prevention of Mental Defect and Disease?" and a discussion of "Available Fields for Research and Prevention in Mental Defect." The speakers in this section include Dr. Adolf Meyer of Baltimore, Dr. C. B. Davenport, Cold Spring Harbor, N. Y., Dr. H. H. Goddard of Vineland, N. J., Dr. Martin W. Barr, superintendent of the Pennsylvania School for Feeble-minded at Elwyn, and Dr. Walter S. Cornell of Philadelphia.

There has been an enormous increase in recent years in the number of charity workers and others generally known as social workers in the United States, both in professional employment and rendering voluntary service. A unique discussion, therefore, is likely to occur under the committee on education for social work, of which Porter R. Lee of the New York School of Philanthropy is chairman. An attempt will be made to define the requirements and standards of this new profession by such speakers as Jeffrey R. Brackett of Boston, Miss Edith Abbott and Dr. Graham Taylor of Chicago, and Professor Devine of New York.

A series of discussions of great significance, from an educational as well as from a social standpoint, will occur in the division on "Children," under the chairmanship of C. C. Carstens, secretary of the Massachusetts Society for the Prevention of Cruelty to Children, which will include the treatment of neglect and dependency among children and also a consideration of "The Reaction of Children's Case Work in the Development of the Constructive and Preventive Work of a Community."

NEW LEGISLATION.

General Acts.

Chapter 12.

An Act relative to the establishment and maintenance of pest houses by cities and towns.

Be it enacted, etc., as follows:

Section 1. Section forty-six of chapter seventy-five of the Revised Laws, as amended by section two of chapter two hundred and six of the acts of the year nineteen hundred and two, and by section two of chapter three hundred and sixty-five of the acts of the year nineteen hundred and six, is hereby further amended by striking out the said section and inserting in place thereof the following: — *Section 46.* A magistrate authorized to issue warrants in criminal cases may issue a warrant directed to the sheriff of the county or his deputy, or to any constable or police officer, requiring him, under the direction of the board of health, to remove any person who is infected with a contagious disease, or to take up and impress convenient houses, lodging, nurses, attendants and other necessaries. The removal authorized by this section may be made to a hospital in any city or town established for the reception of persons having smallpox or other disease dangerous to the public health, provided, that the assent of the board of health of the city or town to which such removal is to be made shall first have been obtained.

Section 2. This act shall take effect upon its passage. [*Approved February 16, 1915.*

CHAPTER 21.

AN ACT RELATIVE TO THE SUPERVISION OF WATER COMPANIES BY THE BOARD OF GAS AND ELECTRIC LIGHT COMMISSIONERS.

Be it enacted, etc., as follows:

SECTION 1. Sections six, seven and eight of chapter seven hundred and eighty-seven of the acts of the year nineteen hundred and fourteen are hereby repealed.

SECTION 2. Chapter six hundred and sixty of the acts of the year nineteen hundred and thirteen is hereby amended by striking out section one and inserting in place thereof the following: — *Section 1.* In all proceedings conducted by the board of gas and electric light commissioners in accordance with the law relating to the petition of any water company for authorization to issue capital stock or bonds, and in all matters connected with the determination by said board of any question relating thereto and before any such authorization is given, said board may require and the state department of health shall, without charge, furnish to said board engineering services and advice for its assistance and guidance in such proceedings.

SECTION 3. Sections two and three of chapter six hundred and sixty of the acts of the year nineteen hundred and thirteen are hereby repealed.

SECTION 4. This act shall take effect upon its passage. [*Approved February 22, 1915.*

MASSACHUSETTS STATE DEPARTMENT OF HEALTH.

Commissioner, Allan J. McLaughlin, M.D.

Division of Sanitary Engineering, . . .	Director, X. H. Goodnough, C.E.
Division of Communicable Diseases, . . .	Director, E. R. Kelley, M.D.
Division of Water and Sewage Laboratories, .	Director, H. W. Clark.
Division of Antitoxin and Vaccine Laboratories,	Director and Pathologist, Milton J. Rosenau, M.D.
Division of Food and Drugs, ...	Director, H. C. Lythgoe, S.B.
Division of Records and Accounts, . . .	Director, Wm. C. Hanson, M.D.

Public Health Council:

Allan J. McLaughlin, M.D., *Chairman.*

Wm. T. Sedgwick, Ph.D.
George C. Whipple, Sc.B.
Milton J. Rosenau, M.D.[1] .
Wm. J. Gallivan, M.D.
David L. Edsall, M.D.
Joseph E. Lamoureux, M.D.

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[1] Resigned from the Public Health Council to take the position of Pathologist and Director of the Division of Antitoxin and Vaccine Laboratories, Jan. 27, 1915.

PUBLIC HEALTH BULLETIN

ISSUED MONTHLY

BY THE

STATE DEPARTMENT OF HEALTH

OF MASSACHUSETTS

FEBRUARY, 1915

Vol. 2, No. 2

Entered as Second-class Matter Oct. 26, 1914, at the Post Office at Boston, Mass., under the Act of Aug. 24, 1912

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APPROVED BY
THE STATE BOARD OF PUBLICATION.

PUBLIC HEALTH BULLETIN.

REPORT UPON THE WORK OF THE BACTERIOLOGICAL LABORATORY FOR THE MONTH OF FEBRUARY, 1915.

The following gives the total number of biological products and diagnostic outfits distributed by the bacteriological laboratory of the State Department of Health during the month of February, 1915: —

Biological Products.

Diphtheria antitoxin: —

4,000 units (special for the Boston City Hospital),	1,176 bottles
3,000 units,	3,776 bottles
1,500 units,	953 bottles
750 units,	878 bottles
Smallpox vaccine,	2,307 tubes
Typhoid vaccine,	511 ampoules
Antimeningitis serum,	106 bottles
Silver nitrate solution,	197 droppers

Diagnostic Outfits.

Culture tubes,	714
Sputum bottles,	259
Widal outfits,	129
Bile outfits,	29
Malaria outfits,	12

The following gives the total number of bacteriological examinations made in the laboratory of the State Department of Health during the month of February, 1915: —

	Number of Examinations.	Diagnosis.		Release.	
		Positive.	Negative.	Positive.	Negative.
Diphtheria,	600	63	240	105	192

	Number of Examinations.	Positive.	Negative.	*Atypical.
Tuberculosis,	202	52	150	
*Typhoid fever (Widal test),	80	12	63	5
Typhoid fever (culture test),	18	–	18	
*Paratyphoid fever,	2	–	2	–
Malaria,	1	–	1	
Miscellaneous,	90			

Total number of examinations made, 993.

FOOD AND DRUGS.

The following tables present the results of the laboratory examinations of samples of food and drugs collected during the month of February, 1915: —

The cities and towns in which samples were collected were: Arlington, Ashburnham, Attleboro, Ayer, Beverly, Boston, Brockton, Brookline, Cambridge, Fall River, Fitchburg, Framingham, Gardner, Haverhill, Lawrence, Lowell, Lynn, Lynnfield, Malden, Methuen, New Bedford, Newton, North Attleborough, North Reading, Oakham, Peabody, Quincy, Revere, Rockland, Salem, Saugus, Somerville, Wakefield, Waltham and Winchendon.

Summary of Analyses.

Articles examined.	Number found to be of Good Quality.	Number adulterated or varying from the Legal Standard.	Total.
Butter,	1	–	1
Canned goods,	1	–	1
Cocoa,	6	–	6
Condimental sauces,	2	–	2
Confectionery,	3	–	3
Cream,	9	1	10
Drugs,	125	19	144
Eggs,[1]	–	8	8
Flavoring extracts: —			
Lemon,	2	1	3
Peppermint,	3	2	5
Honey,	1	–	1
Jams and jellies,	5	–	5
Lard,	2	–	2
Maple sugar,	3	–	3
Maple syrup,	1	–	1
Meat products: —			
Duck,[1]	–	1	1
Hams,[1]	–	4	4
Hamburg steak,	1	–	1
Mince meat,	1	–	1
Sausages,	18	6	24
Milk,	475	115	590
Molasses,	17	–	17
Olive oil,	5	1	6
Pickles,	2	–	2
Shrimp,	6	3	9
Spices,	5	–	5
Totals,	694	161	855

[1] Taken from cold storage.

PROSECUTIONS FOR VIOLATIONS OF THE LAWS RELATING TO FOOD AND DRUGS.

Forty-two convictions were secured during the month of February, 1915, for the sale of adulterated food and drugs, and for violation of the slaughtering laws, as follows: —

NAME OF DEFENDANT.	Address.	Character of Article sold or Nature of Offence.
Ludger Levasseur,	New Bedford,	Milk (total solids, 12.14).
Emanuel D. Lupo,	New Bedford,	Milk (total solids, 10.34).[1]
George H. Jaques,	Methuen,	Milk (total solids, 9.44).[2]
Herman Lahti,	Ashby,	Milk (total solids, 11.28).[2]
Emery C. Willard,	Ashby,	Milk (total solids, 11.06).[2]
Kurt H. Kuechler,	New Bedford,	Sausages (contained starch in excess of 2 per cent.).
James Davidson,	New Bedford,	Sausages (contained starch in excess of 2 per cent.).
Arthur Wilde,	New Bedford,	Sausages (contained starch in excess of 2 per cent.).
Arthur Wilde,	New Bedford,	Sausages (contained starch in excess of 2 per cent.).
Robert E. Bean,	Brockton,	Sausages (contained coloring matter).
Robert E. Bean,	Brockton,	Sausages (contained starch in excess of 2 per cent.).
Daniel F. Perkins,	Fall River,	Sausages (contained starch in excess of 2 per cent.).
Henry J. Furneau,	Lawrence,	Sausages (contained starch in excess of 2 per cent.).
Charles A. Parker,	Lawrence,	Sausages (contained starch in excess of 2 per cent.).
Frank C. Adamson,	Lawrence,	Sausages (contained starch in excess of 2 per cent.).
Thomas Wilkinson,	Lawrence,	Sausages (contained starch in excess of 2 per cent.).
John Holt,	Lawrence,	Sausages (contained starch in excess of 2 per cent.).
John Holt,	Lawrence,	Sausages (contained starch in excess of 2 per cent.).
William A. Almond,	New Bedford,	Sausages (contained starch in excess of 2 per cent.).
William A. Almond,	New Bedford,	Sausages (contained starch in excess of 2 per cent.).
Jacob H. Schmidt,	New Bedford,	Sausages (contained starch in excess of 2 per cent.).
John Barran,	Fall River,	Sausages (contained starch in excess of 2 per cent.).
John Barran,	Fall River,	Sausages (contained starch in excess of 2 per cent.).
Jesse V. Velosa,	Fall River,	Sausages (contained coloring matter).[3]
Fritz L. Gareis,	Brockton,	Sausages (contained starch in excess of 2 per cent.).
Fritz L. Gareis,	Brockton,	Sausages (contained coloring matter).
William A. Butler,	Haverhill,	Sausages (contained coloring matter).
William A. Butler,	Haverhill,	Sausages (contained starch in excess of 2 per cent.).
Henry J. Furneau,	Lawrence,	Pressed ham (contained starch in excess of 2 per cent.).
William E. Toolin,	Brookline,	Molasses (contained 30 per cent. glucose).
John A. Lindgren,	Gardner,	Molasses (contained 30 per cent. glucose).
Orville A. Gould,	Gardner,	Spirit of anise (not U. S. P.).

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[1] Skimmed. [2] Watered. [3] Appealed.

NAME OF DEFENDANT.	Address.	Character of Article sold or Nature of Offence.
Frank E. Fowler,	New Bedford,	Spirit of nitrous ether (not U. S. P.).
Henry H. Parkis,	Gardner,	Spirit of nitrous ether (not U. S. P.).
William Rourke,	Gardner,	Spirit of nitrous ether (not U. S. P.).
William A. Kimlock,	Salem,	Spirit of nitrous ether (not U. S. P.).
Daniel J. Cavan,	Salem,	Spirit of nitrous ether (not U. S. P.).
George E. Crane,	Haverhill,	Spirit of nitrous ether (not U. S. P.).
Charles A. Nelson,	Haverhill,	Spirit of nitrous ether (not U. S. P.).
Thomas Nabb,	Fall River,	Spirit of nitrous ether (not U. S. P.).
Charles St. George,	Fall River,	Spirit of nitrous ether (not U. S. P.).
Hyman Broverman,	Holliston,	Slaughtering illegally.

Fines imposed, $475.98.

ARTICLES IN COLD STORAGE CONDEMNED UPON PHYSICAL AND CHEMICAL EXAMINATIONS AS UNFIT FOR FOOD.

Date.	ARTICLES.	Weight (Pounds).	Reasons.	Disposition.
Feb. 4, 1915	Canned eggs,	60	Decomposed,	Incinerated.
Feb. 4, 1915	Pork loins,	40	Soiled and dried,	Incinerated.
Feb. 4, 1915	Calves' heads,	24	Soiled and dried,	Incinerated.
Feb. 4, 1915	Beef hearts,	35	Soiled and dried,	Incinerated.
Feb. 4, 1915	Fresh hams,	36	Soiled and dried,	Incinerated.
Feb. 4, 1915	Miscellaneous poultry,	286	Soiled and dried,	Incinerated.
Feb. 6, 1915	Blood sausage,	122	Sour,	Incinerated.
Feb. 15, 1915	Turkeys,	26	Tainted,	Rendered.
Feb. 18, 1915	Squabs,	173	Tainted,	Rendered.
Feb. 20, 1915	Turkeys,	25	Decomposed,	Rendered.
Feb. 24, 1915	Fresh hams,	4,800	Decomposed,	Rendered.
Feb. 27, 1915	Hogs' snouts,	1,174	Decomposed,	Rendered.
Total,		6,801		

SAMPLES OF FOOD WHICH UPON EXAMINATION WERE FOUND TO BE ADULTERATED.

ESSENCE OF LEMON.

Contained 0.1 Per Cent. Oil; labeled 2 Per Cent.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
26908	J. J. Walsh, Lawrence.	

OLIVE OIL.

Contained 40 Per Cent. Cottonseed Oil.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
26922	Lawrence Street Market, Lawrence.	

ESSENCE OF PEPPERMINT.

Formula Incorrect.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
26835	E. Cloutier, Fall River.	
26752	Langier Grocery, Fall River.	

SAMPLES OF FOOD WHICH UPON EXAMINATION WERE FOUND TO BE ADULTERATED — *Concluded.*

SAUSAGES.

Contained More than 2 Per Cent. Starch.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
99–T	A. Remy, Fall River.	
101–T	A. Remy, Fall River.	
26716	Zimmerman & Co., Boston.	

Contained Coloring Matter.

9891–S	Oscar A. Keusch, Boston, ...	Carl A. Weitz, Boston.
9993–S	Carl A. Weitz, Boston, ...	Carl A. Weitz, Boston.

SHRIMP.

Contained Borax.

26640	Barlow's Market, Lowell.	
26641	Boston Fish Market, Lowell.	
9921–S	Gove & Mollins, Boston.	

SAMPLES OF DRUGS WHICH UPON EXAMINATION WERE FOUND TO BE ADULTERATED.

SPIRIT OF ANISE.

Number of Sample.	DEALER.	Wholesaler or Manufacturer.	Per Cent. of Required Strength.
88–A	Thomas J. Donovan, Salem, ...	– –	0
436–A	Thomas J. Donovan, Salem, ...	– –	0

SPIRIT OF CAMPHOR.

26689	Church & Hammond, New Bedford, ...	– –	85
90–A	Depot Pharmacy, Salem, ...	– –	83
434–A	Depot Pharmacy, Salem, ...	– –	86
26654	J. J. Forrest, Lawrence, ...	– –	80
26918	J. J. Forrest, Lawrence, ...	– –	86

CAMPHORATED OIL.

486–A	William D. Wheeler, Roxbury, ...	– –	55

SPIRIT OF NITRE.

26751	S. Leyland, Fall River, ...	Frank E. Harris Company, Binghamton, N. Y.	67
q 15207	Lion Pharmacy, Boston, ...	– –	49
q 15389	Lion Pharmacy, Boston, ...	– –	41
q 15205	Emanuel Macaluso, Boston, ...	– –	49
q 15388	Emanuel Macaluso, Boston, ...	– –	80

SAMPLES OF DRUGS WHICH UPON EXAMINATION WERE FOUND TO BE ADULTERATED — *Concluded.*

SPIRIT OF PEPPERMINT.

Number of Sample.	DEALER.	Wholesaler or Manufacturer.	Per Cent. of Required Strength.
9927-S	E. L. Sargent Company, Beverly, ...	– –	54
67-T	E. L. Sargent Company, Beverly, ...	– –	62
26907[1]	J. J. Walsh, Lawrence.		

TINCTURE OF IODINE.

q 15206	Emanuel Macaluso, Boston, ...	– –	54
q 15387	Emanuel Macaluso, Boston, ...	– –	55

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[1] Incorrectly marked.

SAMPLES OF MILK WHICH UPON EXAMINATION WERE FOUND TO BE ADULTERATED.

Number of Sample.	Name of Dealer, Wholesaler or Producer.	Results of Analyses.
q 15260	Ira Cheney, Saugus, ...	Total solids, 11.54 per cent.; fat, 3.40 per cent.; contained added water.
q 15261	Ira Cheney, Saugus, ...	Total solids, 11.54 per cent.; fat, 3.70 per cent.; contained added water.
q 15297	Ira Cheney, Saugus, ...	Total solids, 11.24 per cent.; fat, 3.10 per cent.; contained added water.
q 15298	Ira Cheney, Saugus, ...	Total solids, 11.18 per cent.; fat, 3.20 per cent.; contained added water.
q 15299	Ira Cheney, Saugus, ...	Total solids, 11.09 per cent.; fat, 3.30 per cent.; contained added water.
q 15300	Ira Cheney, Saugus, ...	Total solids, 11.24 per cent.; fat, 3.50 per cent.; contained added water.
26780	J. J. Cronin, Lawrence, ...	Total solids, 10.82 per cent.; fat, 2.60 per cent.; proteins, 3.02 per cent.; skimmed milk.
26703	George H. Jaques, Methuen, . . .	Total solids, 8.44 per cent.; fat, 2.60 per cent.; contained added water.
26704	George H. Jaques, Methuen, . .	Total solids, 10.18 per cent.; fat, 3 per cent.; contained added water.
26705	George H. Jaques, Methuen, . .	Total solids, 10.16 per cent.; fat, 3.05 per cent.; contained added water.
26706	George H. Jaques, Methuen, . .	Total solids, 9.54 per cent.; fat, 3 per cent.; contained added water.
26707	George H. Jaques, Methuen, . .	Total solids, 9.42 per cent.; fat, 2.70 per cent.; contained added water.
26708	George H. Jaques, Methuen, . .	Total solids, 9.68 per cent.; fat, 3 per cent.; contained added water.
26709	George H. Jaques, Methuen, . .	Total solids, 8.22 per cent.; fat, 2.70 per cent.; contained added water.
26710	George H. Jaques, Methuen, . .	Total solids, 9.44 per cent.; fat, 3 per cent.; contained added water.
q 15328	J. A. MacGregor, Lynnfield Centre, .	Total solids, 11.32 per cent.; fat, 2.80 per cent.; proteins, 3.35 per cent.; skimmed milk.
q 15324	A. L. Mansfield, Wakefield, . . .	Total solids, 11.60 per cent.; fat, 2.75 per cent.; proteins, 3.24 per cent.; skimmed milk.
q 15307	Jacob Shapiro, Saugus, ...	Total solids, 12.36 per cent.; fat, 3.10 per cent.; proteins, 3.53 per cent.; skimmed milk.
q 15311	Jacob Shapiro, Saugus, ...	Total solids, 11.64 per cent.; fat, 2.30 per cent.; proteins, 3.12 per cent; skimmed milk.

REPORT ON INSPECTION OF DAIRIES.

Owing to the continuance of foot-and-mouth disease among cattle in a number of towns in the State, the regular inspection of dairies was not resumed during the month of February, 1915.

RETURNS OF DISEASES.

Cases of Diseases declared by the State Department of Health to be Dangerous to the Public Health.

[Under the provisions of section 52 of chapter 75 of the Revised Laws.]

DISEASE.	Week ending —				
	Feb. 6.	Feb. 13.	Feb. 20.	Feb. 27.	Total.
Anterior poliomyelitis, . . .	–	2	–	2	4
Anthrax, ...	–	–	1	–	1
Cerebro-spinal meningitis, . . .	2	1	3	5	11
Chicken-pox, ...	178	205	170	152	805
Diphtheria, ...	238	180	147	177	742
Dog bite (requiring antirabic treatment),	–	1	2	6	9
German measles, ...	6	5	3	6	20
Infectious diseases of the eye: —					
(*a*) Ophthalmia neonatorum, . .	54	59	74	54	241
(*b*) Suppurative conjunctivitis, . .	7	8	1	5	21
(*c*) Trachoma, ...	–	3	–	1	4
Malaria, ...	3	–	–	–	3
Measles, ...	313	354	402	470	1,539
Mumps, ...	44	75	61	47	227
Rabies, ...	–	–	1	–	1
Scarlet fever, ...	203	200	243	205	851
Septic sore throat, ...	4	5	6	5	20
Tetanus, ...	–	1	–	–	1
Tuberculosis, pulmonary (or not classified), ...	116	171	166	121	574
Tuberculosis, other forms, . . .	16	8	14	7	45
Tuberculous meningitis, . . .	1	2	2	2	7
Typhoid fever, ...	20	29	18	24	91
Whooping cough, ...	143	127	185	159	614

RETURNS OF DEATHS.

WEEKLY RETURNS OF DEATHS FROM DISEASES DECLARED BY THE STATE DEPARTMENT OF HEALTH TO BE DANGEROUS TO THE PUBLIC HEALTH IN CITIES AND TOWNS IN MASSACHUSETTS.

[Under the provisions of chapter 210, Acts of 1913.]

Week ending Feb. 6, 1915.

CITIES AND TOWNS.	Population. Census for 1910.	Cerebro-spinal Meningitis.	Chicken-pox.	Diphtheria.	Dog Bite.	Measles.	Mumps.	Ophthalmia Neonatorum.	Scarlet Fever.	Tuberculosis, Pulmonary (or not classified).	Tuberculosis, Other Forms.	Typhoid Fever.	Whooping Cough.
Boston,	686,092	1	–	7[1]	–	1	–	–	2	21[1]	4[1]	–	–
Worcester,	145,986	1	–	2	–	–	–	–	–	4	–	–	–
Fall River,	119,295	–	–	–	–	–	–	–	–	–	–	–	–
Lowell,	106,294	–	–	–	–	–	–	–	–	1	–	–	1
Cambridge,	104,839	–	–	3	–	–	–	–	–	4	1	–	–
New Bedford,	96,652	–	–	1	–	–	–	–	–	5	1	–	–
Lynn,	89,336	–	–	–	–	–	–	–	–	2	2	–	–
Springfield,	88,926	–	–	1	–	–	–	–	–	1	1	–	–
Lawrence,	85,892	–	–	–	–	–	–	–	–	–	–	–	–
Somerville,	77,236	–	–	–	–	1	–	–	–	1	–	–	–
Holyoke,	57,730	–	–	1	–	–	–	–	–	1	–	–	–
Brockton,	56,878	–	–	–	–	–	–	–	–	–	–	–	–
Malden,	44,404	–	–	–	–	–	–	–	–	1	–	–	–
Haverhill,	44,115	–	6	2	–	4	–	–	10	1	–	–	–
Salem,	43,697	–	–	–	–	–	–	–	–	–	–	–	–
Newton,	39,806	–	–	–	–	–	–	–	–	2	–	–	–
Fitchburg,	37,826	–	–	1	–	–	–	–	2	–	–	1	–
Taunton,	34,259	–	–	–	–	–	–	–	–	1	1	–	–
Everett,	33,484	–	–	–	–	–	–	–	–	–	–	–	–
Quincy,	32,642	–	–	–	–	–	–	–	–	–	–	–	–
Chelsea,	32,452	–	–	–	–	–	–	–	–	1	–	1	–

Pittsfield,	32,121	-	-	-	-	-	-	-	-	-	-	-	-
Waltham,	27,834	-	-	-	-	-	-	-	-	1	-	-	-
Brookline,	27,792	-	-	-	-	-	-	-	-	-	-	-	-
Chicopee,	25,401	-	-	-	-	-	-	-	-	1	-	-	-
Gloucester,	24,398	-	-	-	-	-	-	-	-	-	-	-	-
Medford,	23,150	-	-	1	-	-	-	-	-	-	-	-	-
North Adams,	22,019	-	-	-	-	-	-	-	-	1	1	-	-
Northampton,	19,431	-	-	-	-	-	-	-	-	-	-	-	-
Beverly,	18,650	-	-	-	-	-	-	-	-	-	-	-	-
Revere,	18,219	-	-	1	-	-	-	-	-	-	-	-	-
Leominster,	17,580	-	-	-	-	-	-	-	-	-	-	-	-
Attleboro,	16,215	-	-	-	-	-	-	-	-	-	-	-	-
Westfield,	16,044	-	-	-	-	-	-	-	-	3[2]	-	-	-
Peabody,	15,721	-	-	-	-	-	-	-	-	1	-	-	-
Melrose,	15,715	-	-	-	-	-	-	-	-	1	-	-	-
Woburn,	15,308	-	-	1	-	-	-	-	-	1	-	-	-
Newburyport,	14,949	-	-	-	-	-	-	-	-	1	-	-	-
Gardner,	14,699	-	-	-	-	-	-	-	-	-	-	-	-
Marlborough,	14,579	-	-	-	-	-	-	-	-	-	-	-	-
Clinton,	13,075	-	-	-	-	-	-	-	-	-	-	-	-
Milford,	13,055	-	-	-	-	-	-	-	-	-	-	-	-
Adams,	13,026	-	-	-	-	-	-	-	-	-	-	-	-
Framingham,	12,948	-	-	-	-	-	-	-	-	-	-	-	-
Weymouth,	12,895	-	-	-	-	-	-	-	-	-	-	-	-
Watertown,	12,875	-	-	-	-	-	-	-	-	-	-	-	-
Southbridge,	12,592	-	-	-	-	-	-	-	-	-	-	-	-
Plymouth,	12,141	-	-	-	-	-	-	-	-	-	-	-	-
Webster,	11,509	-	-	-	-	-	-	-	-	-	-	-	-
Methuen,	11,448	-	-	-	-	-	-	-	-	-	-	-	-
Wakefield,	11,404	-	-	-	-	-	-	-	-	-	-	-	-
Arlington,	11,187	-	-	-	-	-	-	-	-	-	-	-	-
Greenfield,	10,427	-	-	-	-	-	-	-	-	-	-	-	-
Winthrop,	10,132	-	-	1	-	-	-	-	-	-	1	-	-
Total of reporting cities and towns of more than 10,000 population,	1,903,471	2	6	22	-	6	-	-	14	56	12	2	1
Norwood,	8,014	-	-	1	-	-	-	-	-	-	-	-	-
Whitman,	7,292	-	-	-	-	-	-	-	-	1	-	-	-
Warren,	4,188	-	-	1	-	-	-	-	-	-	-	-	-
Acushnet,	1,692	-	-	-	-	-	-	-	3	-	-	-	-
Total of reporting towns of less than 10,000 population,	21,186	-	-	2	-	-	-	-	3	1	-	-	-

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[1] One nonresident.

[2] Two nonresidents.

Week ending Feb. 13, 1915.

CITIES AND TOWNS.	Population. Census for 1910.	Cerebro-spinal Meningitis.	Chicken-pox.	Diphtheria.	Dog Bite.	Measles.	Mumps.	Ophthalmia Neonatorum.	Scarlet Fever.	Tuberculosis, Pulmonary (or not classified).	Tuberculosis, Other Forms.	Typhoid Fever.	Whooping Cough.
Boston,	686,092	-	-	4[1]	-	1	-	-	1[2]	24[1]	6	1	2
Worcester,	145,986	-	-	2	-	-	-	-	-	5	3	-	-
Fall River,	119,295	-	-	1	-	1	-	-	1	1	1	-	-
Lowell,	106,294	-	-	-	-	-	-	-	-	3	-	-	-
Cambridge,	104,839	-	-	-	-	-	-	-	-	5	-	-	-
New Bedford,	96,652	-	-	-	-	-	-	-	-	7	-	-	-
Lynn,	89,336	-	-	-	-	-	-	-	-	4	-	-	-
Springfield,	88,926	-	-	-	-	-	-	-	-	1	1	-	-
Lawrence,	85,892	-	-	-	-	-	-	-	-	-	-	-	-
Somerville,	77,236	-	-	1	-	-	-	-	1	3	2	-	-
Holyoke,	57,730	-	-	-	-	-	-	-	-	-	1	-	-
Brockton,	56,878	-	-	-	-	-	-	-	-	-	-	-	-
Malden,	44,404	-	-	-	-	-	-	-	-	-	-	-	-
Haverhill,	44,115	-	-	-	-	-	-	-	-	3	-	-	-
Salem,	43,697	-	-	-	-	-	-	-	-	-	-	-	-
Newton,	39,806	-	-	-	-	6	-	-	4	-	-	-	-
Fitchburg,	37,826	-	-	1	-	-	-	-	-	1	-	-	-
Taunton,	34,259	-	-	-	-	-	-	-	-	2	-	-	1
Everett,	33,484	-	-	-	-	-	-	-	-	-	-	-	-
Quincy,	32,642	-	-	-	-	-	-	-	-	-	-	-	-
Chelsea,	32,452	-	-	-	-	-	-	-	-	1	-	-	-
Pittsfield,	32,121	-	-	-	-	-	-	-	-	2	-	-	-
Waltham,	27,834	-	-	-	-	-	-	-	-	2	-	-	-
Brookline,	27,792	-	-	-	-	-	-	-	-	-	-	-	-
Chicopee,	25,401	-	-	-	-	-	-	-	-	-	-	-	-
Gloucester,	24,398	-	-	-	-	-	-	-	-	-	-	-	-
Medford,	23,150	-	-	-	-	-	-	-	-	-	-	-	-
North Adams,	22,019	-	-	-	-	-	-	-	-	-	-	-	-
Northampton,	19,431	-	-	-	-	-	-	-	-	1	-	-	-
Beverly,	18,650	-	-	1	-	-	-	-	-	-	-	-	-
Revere,	18,219	-	-	-	-	-	-	-	-	-	-	-	-
Leominster,	17,580	-	-	-	-	-	-	-	-	-	-	-	-

Attleboro,	16,215	–	–	–	–	–	–	–	–	–	–	–	–
Westfield,	16,044	–	–	–	–	–	–	–	–	3[3]	–	–	–
Peabody,	15,721	–	–	–	–	–	–	–	–	–	–	–	–
Melrose,	15,715	–	–	–	–	–	–	–	–	–	–	–	–
Woburn,	15,308	–	–	–	–	–	–	–	–	–	–	–	–
Newburyport,	14,949	–	–	–	–	–	–	–	–	–	–	–	–
Gardner,	14,699	–	–	–	–	–	–	–	–	–	–	–	–
Marlborough,	14,579	–	–	–	–	–	–	–	–	–	–	–	–
Clinton,	13,075	–	–	–	–	–	–	–	–	–	–	1	–
Milford,	13,055	–	–	–	–	–	–	–	–	–	–	–	–
Adams,	13,026	–	–	–	–	–	–	–	–	2	–	–	–
Framingham,	12,948	–	–	–	–	–	–	–	–	–	–	–	–
Weymouth,	12,895	–	–	–	–	–	–	–	–	–	–	–	–
Watertown,	12,875	–	–	–	–	–	–	–	–	–	–	–	–
Southbridge,	12,592	–	–	–	–	–	–	–	–	–	–	–	–
Plymouth,	12,141	–	–	–	–	–	–	–	–	–	–	–	–
Webster,	11,509	–	–	–	–	–	–	–	–	–	–	–	–
Methuen,	11,448	–	–	–	–	–	–	–	–	–	–	–	–
Wakefield,	11,404	–	–	–	–	–	–	–	–	–	–	–	–
Arlington,	11,187	–	–	–	–	–	–	–	–	–	–	–	–
Greenfield,	10,427	–	–	–	–	–	–	–	–	–	–	1	–
Winthrop,	10,132	–	–	–	–	–	–	–	–	–	–	–	–
Total of reporting cities and towns of more than 10,000 population,	1,911,452	–	–	10	–	8	[1] –	–	7	70	14	3	3
Northbridge,	8,807	–	–	–	–	–	–	–	–	–	1	–	–
Braintree,	8,066	–	–	–	–	–	–	–	–	1	–	–	–
Whitman,	7,292	–	–	–	–	–	–	–	–	–	1	–	–
Mansfield,	5,183	–	–	–	–	–	–	–	–	1	–	–	–
Rockport,	4,211	–	–	–	–	–	–	1	–	–	–	–	–
Somerset,	2,798	–	–	1	–	–	–	–	–	–	–	–	–
Total of reporting towns of less than 10,000 population,	31,174	–	–	1	–	–	–	1	–	2	2	–	–

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[1] Two nonresidents.

[2] One nonresident.

[3] Nonresidents.

Week ending Feb. 20, 1915.

CITIES AND TOWNS.	Population. Census for 1910.	Cerebro-spinal Meningitis.	Chicken-pox.	Diphtheria.	Dog Bite.	Measles.	Mumps.	Ophthalmia Neonatorum.	Scarlet Fever.	Tuberculosis, Pulmonary (or not classified).	Tuberculosis, Other Forms.	Typhoid Fever.	Whooping Cough.
Boston,	686,092	–	–	5	–	1	–	–	3	21[1]	4[2]	1	4
Worcester,	145,986	–	–	1	–	–	–	–	–	1	–	–	–
Fall River,	119,295	–	–	–	–	–	–	–	–	5	–	–	–
Lowell,	106,294	–	–	–	–	–	–	–	–	4	–	–	–
Cambridge,	104,839	–	–	1	–	–	–	–	–	2	–	–	–
New Bedford,	96,652	–	–	–	–	–	–	–	–	1	1	–	1
Lynn,	89,336	–	–	–	–	–	–	–	–	1	1	–	–
Springfield,	88,926	–	–	–	–	–	–	–	–	2	–	–	–
Lawrence,	85,892	–	–	–	–	–	–	–	–	–	–	–	–
Somerville,	77,236	–	–	–	–	–	–	–	–	2	–	–	–
Holyoke,	57,730	–	–	–	–	–	–	–	–	1	2	–	–
Brockton,	56,878	–	–	1	–	–	–	–	–	–	–	–	–
Malden,	44,404	–	–	–	–	–	–	–	–	–	–	–	–
Haverhill,	44,115	–	–	–	–	–	–	–	–	–	–	1	–
Salem,	43,697	–	–	–	–	–	–	–	–	–	–	–	–
Newton,	39,806	–	–	–	–	–	–	–	–	–	–	–	–
Fitchburg,	37,826	–	–	–	–	–	–	–	–	–	–	–	–
Taunton,	34,259	–	–	–	–	–	–	–	–	1	1	–	–
Everett,	33,484	–	–	–	–	–	–	–	1	–	–	–	–
Quincy,	32,642	–	–	–	–	–	–	–	–	–	–	–	–
Chelsea,	32,452	–	–	–	–	–	–	–	–	–	–	–	–
Pittsfield,	32,121	1	–	–	–	–	–	–	–	–	–	–	–
Waltham,	27,834	–	–	–	–	–	–	–	–	2	1	–	–
Brookline,	27,792	–	–	–	–	–	–	–	–	–	–	–	–
Chicopee,	25,401	–	–	–	–	–	–	–	–	2	–	–	–
Gloucester,	24,398	–	–	–	–	–	–	–	–	–	–	–	–
Medford,	23,150	–	–	–	–	–	–	–	–	–	–	–	–
North Adams,	22,019	–	–	–	–	–	–	–	–	1	–	–	–
Northampton,	19,431	–	–	–	–	–	–	–	–	–	1	–	–
Beverly,	18,650	–	–	–	–	–	–	–	–	–	–	–	1
Revere,	18,219	–	–	–	–	–	–	–	–	–	–	–	–
Leominster,	17,580	–	–	–	–	–	–	–	–	1	–	–	–

Attleboro,	16,215	–	–	–	–	–	–	–	–	–	–	–	–
Westfield,	16,044	–	–	–	–	–	–	–	–	1[2]	–	–	–
Peabody,	15,721	–	–	–	–	–	–	–	–	–	–	–	–
Melrose,	15,715	–	–	–	–	–	–	–	–	–	–	–	–
Woburn,	15,308	–	–	–	–	–	–	–	–	–	–	–	–
Newburyport,	14,949	–	–	–	–	–	–	–	–	–	–	–	–
Gardner,	14,699	–	–	–	–	–	–	–	–	–	–	–	–
Marlborough,	14,579	–	–	–	–	–	–	–	–	–	–	–	–
Clinton,	13,075	–	–	–	–	–	–	–	–	–	–	–	–
Milford,	13,055	–	–	–	–	–	–	–	–	–	–	–	–
Adams,	13,026	–	–	–	–	–	–	–	–	–	–	–	–
Framingham,	12,948	–	–	–	–	–	–	–	–	–	–	–	–
Weymouth,	12,895	–	–	–	–	–	–	–	–	–	–	–	–
Watertown,	12,875	–	–	–	–	–	–	–	–	–	–	–	–
Southbridge,	12,592	–	–	–	–	–	–	–	–	–	–	–	–
Plymouth,	12,141	–	–	–	–	–	–	–	–	–	–	–	–
Webster,	11,509	–	–	–	–	–	–	–	–	–	–	–	–
Methuen,	11,448	–	–	–	–	–	–	–	–	–	–	–	–
Wakefield,	11,404	–	–	–	–	–	–	–	–	–	–	–	–
Arlington,	11,187	–	–	–	–	–	–	–	–	–	–	–	–
Greenfield,	10,427	–	–	–	–	–	–	–	–	–	–	–	–
Winthrop,	10,132	–	–	–	–	–	–	–	–	–	–	–	–
Total of reporting cities and towns of more than 10,000 population,	1,844,892	1	–	8	–	1	–	–	4	48	11	2	6
Saugus,	8,047	–	–	–	–	–	–	–	–	2	–	–	–
Total of reporting towns of less than 10,000 population,	8,047	–	–	–	–	–	–	–	–	2	–	–	–

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[1] Four nonresidents.

[2] One nonresident.

Week ending Feb. 27, 1915.

CITIES AND TOWNS.	Population. Census for 1910.	Cerebro-spinal Meningitis.	Chicken-pox.	Diphtheria.	Dog Bite.	Measles.	Mumps.	Ophthalmia Neonatorum.	Scarlet Fever.	Tuberculosis, Pulmonary (or not classified).	Tuberculosis, Other Forms.	Typhoid Fever.	Whooping Cough.
Boston,	686,092	2	1[1]	3	–	–	–	–	2	25[2]	3[1]	1	3
Worcester,	145,986	–	–	1	–	–	–	–	–	4	1	–	-
Fall River,	119,295	–	–	1	–	–	–	–	1	6	1	–	–
Lowell,	106,294	–	–	–	–	–	–	–	–	1	–	–	–
Cambridge,	104,839	–	–	1	–	–	–	–	–	7	–	–	1
New Bedford,	96,652	–	–	1	–	–	–	–	1	5	1	–	–
Lynn,	89,336	–	–	–	–	–	–	–	–	–	1	–	–
Springfield,	88,926	–	–	–	–	–	–	–	–	1	–	1	1
Lawrence,	85,892	–	–	–	–	–	–	–	–	–	–	–	–
Somerville,	77,236	–	–	–	–	–	–	–	–	3	–	–	–
Holyoke,	57,730	–	–	–	–	–	–	–	–	–	–	–	–
Brockton,	56,878	–	–	1	–	–	–	–	1	–	1	–	–
Malden,	44,404	–	–	–	–	–	–	–	–	2	–	–	–
Haverhill,	44,115	–	–	4	4	6	1	1	8	–	–	–	1
Salem,	43,697	–	–	–	–	–	–	–	–	–	–	–	–
Newton,	39,806	–	–	–	–	–	–	–	1	–	–	–	–
Fitchburg,	37,826	–	–	–	–	–	–	–	–	–	–	–	–
Taunton,	34,259	–	–	–	–	–	–	–	–	3	–	–	–
Everett,	33,484	–	–	–	–	–	–	–	–	2	–	–	–
Quincy,	32,642	–	–	–	–	–	–	–	–	–	–	–	–
Chelsea,	32,452	–	–	–	–	–	–	–	–	–	1	–	1
Pittsfield,	32,121	–	–	–	–	–	–	–	–	2	–	–	–
Waltham,	27,834	–	–	–	–	–	–	–	–	–	–	–	–
Brookline,	27,792	–	–	–	–	–	–	–	–	–	–	–	–
Chicopee,	25,401	–	–	1	–	–	–	–	–	2	1	–	1
Gloucester,	24,398	–	–	–	–	–	–	–	–	–	–	–	–
Medford,	23,150	–	–	–	–	–	–	–	–	1	–	–	–
North Adams,	22,019	–	–	–	–	–	–	–	–	–	–	–	–
Northampton,	19,431	–	–	–	–	–	–	–	–	–	–	–	–
Beverly,	18,650	–	–	2	–	–	–	–	–	–	–	–	–
Revere,	18,219	–	–	–	–	–	–	–	–	–	–	–	–
Leominster,	17,580	–	–	–	–	–	–	–	–	–	–	–	–

Attleboro,	16,215	–	–	–	–	–	–	–	–	–	–	–	–
Westfield,	16,044	–	–	–	–	–	–	–	–	1[1]	–	–	–
Peabody,	15,721	–	–	–	–	–	–	–	–	–	–	–	–
Melrose,	15,715	–	–	–	–	–	–	–	–	–	–	–	–
Woburn,	15,308	–	–	1	–	–	–	–	–	–	1	–	–
Newburyport,	14,949	–	–	–	–	–	–	–	–	–	–	–	–
Gardner,	14,699	–	–	–	–	–	–	–	–	–	–	–	–
Marlborough,	14,579	–	–	–	–	–	–	–	–	–	–	–	–
Clinton,	13,075	–	–	–	–	–	–	–	–	–	–	–	–
Milford,	13,055	–	–	–	–	–	–	–	–	–	–	–	–
Adams,	13,026	–	–	–	–	–	–	–	–	1	–	–	2
Framingham,	12,948	–	–	–	–	–	–	–	–	–	–	–	–
Weymouth,	12,895	–	–	–	–	–	–	–	–	–	–	–	–
Watertown,	12,875	–	–	–	–	–	–	–	–	–	–	–	–
Southbridge,	12,592	–	–	–	–	–	–	–	–	–	–	–	–
Plymouth,	12,141	–	–	–	–	–	–	–	–	–	–	–	–
Webster,	11,509	–	–	–	–	–	–	–	–	–	–	–	–
Methuen,	11,448	–	–	–	–	–	–	–	–	–	–	–	–
Wakefield,	11,404	–	–	–	–	–	–	–	–	–	–	–	–
Arlington,	11,187	–	–	–	–	–	–	–	–	–	–	–	–
Greenfield,	10,427	–	–	–	–	–	–	–	–	–	–	–	–
Winthrop,	10,132	–	–	–	–	–	–	–	–	–	–	–	–
Total of reporting cities and towns of more than 10,000 population,	1,943,754	2	1	16	4	6	1	1	14	66	11	2	10
Danvers,	9,407	–	–	–	–	–	–	–	–	2	–	–	–
Amherst,	5,112	–	–	–	–	–	–	–	–	–	–	–	1
Provincetown,	4,369	–	–	–	–	–	–	–	–	1	–	–	–
Rockport,	4,211	–	–	–	–	–	–	–	–	1	–	–	–
Upton,	2,071	–	–	–	–	–	–	–	–	–	–	1	–
Total of reporting towns of less than 10,000 population,	25,170	–	–	–	–	–	–	–	–	4	–	1	1

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[1] One nonresident.

[2] Four nonresidents.

NEW LEGISLATION.

General Acts.

Chapter 22.

An Act relative to licensing retail dealers in chopped meats and sausages.

Be it enacted, etc., as follows:

Section 1. The provisions of chapter three hundred and twenty-five of the acts of the year nineteen hundred and fourteen, requiring a license for the manufacture of sausages or chopped meat, shall not apply to retail dealers in chopped meats and unsmoked sausages who manufacture the same for their retail trade.

Section 2. This act shall take effect upon its passage. [*Approved February 23, 1915.*

Chapter 44.

An Act to authorize towns to appropriate money to be paid to hospitals for the reception, care and treatment of certain persons.

Be it enacted, etc., as follows:

Section 1. Any town not maintaining or managing a hospital may annually appropriate a sum, not exceeding five hundred dollars, to be paid to a hospital established in such town or in the vicinity thereof, for the establishment and maintenance of a free bed in the hospital for the care and treatment of persons certified by the selectmen of such town to be residents of the town and unable to pay for such care and treatment.

Section 2. This act shall take effect upon its passage. [*Approved March 9, 1915.*

Chapter 52.

An Act relative to the records of local boards of health on diseases declared by the state department of health to be dangerous to the public health.

Be it enacted, etc., as follows:

Section 1. Section fifty-one of chapter seventy-five of the Revised Laws is hereby amended by striking out the words "in blank books to be provided by the secretary of the commonwealth", in the first and second lines, and by inserting after the word "report", in the sixth line, the words: — or other data required by the state department of health. Such record shall be kept in such manner or upon such forms as shall be prescribed by the said department, — so as to read as follows: — *Section 51.* The board of health shall keep a record of all reports received pursuant to the two preceding sections, which shall contain the name and location of all persons who are sick, their disease, the name of the person who reports the case and the date of such report or other data required by the state department of health. Such record shall be kept in such manner or upon such forms as shall be prescribed by the said department. Said board shall give immediate information to the school committee of all contagious diseases so reported to them.

SECTION 2. This act shall take effect upon its passage. [*Approved March 12, 1915.*

CHAPTER 55.

AN ACT RELATIVE TO THE SALE AT RETAIL OF EGGS TAKEN FROM COLD STORAGE.

Be it enacted, etc., as follows:

SECTION 1. Section one of chapter five hundred and thirty-eight of the acts of the year nineteen hundred and thirteen, as amended by chapter five hundred and forty-five of the acts of the year nineteen hundred and fourteen, is hereby further amended by striking out the words "and shall be done in such manner as is approved by the state board of health", at the end of the section, and inserting in place thereof the words: — except that the container in which eggs sold at retail are delivered to the customer may be marked in letters less than one inch in height if uncondensed Gothic type is used, but such letters shall in no case be less than one half inch in height. All marking required by the provisions of this act shall be done in such manner as shall be approved by the commissioner of health, — so as to read as follows: — *Section 1.* Whenever eggs that have been in cold storage are sold at wholesale or retail, or offered or exposed for sale, the basket, box or other container in which the eggs are placed shall be marked plainly and conspicuously with the words "cold storage eggs", or there shall be attached to such container a placard or sign having on it the said words. If eggs that have been in cold storage are sold at retail or offered or exposed for sale without a container, or placed upon a counter or elsewhere, a sign or placard, having the words "cold storage eggs" plainly and conspicuously marked upon it, shall be displayed in, upon or immediately above the said eggs; the intent of this act being that cold storage eggs sold or offered or exposed for sale shall be designated in such a manner that the purchaser will know that they are cold storage eggs. The display of the words "cold storage eggs", as required by this act, shall be in letters not less than one inch in height except that the container in which eggs sold at retail are delivered to the customer may be marked in letters less than one inch in height if uncondensed Gothic type is used, but such letters shall in no case be less than one half inch in height. All marking required by the provisions of this act shall be done in such manner as shall be approved by the commissioner of health.

SECTION 2. This act shall take effect upon its passage. [*Approved March 12, 1915.*

OPINION OF THE ATTORNEY-GENERAL RELATIVE TO THE AUTHORITY OF LOCAL BOARDS OF HEALTH OVER THE MANUFACTURE, SALE AND CARE OF ICE CREAM.

THE COMMONWEALTH OF MASSACHUSETTS,
DEPARTMENT OF THE ATTORNEY-GENERAL,
BOSTON, March 22, 1915.

ALLAN J. MCLAUGHLIN, M.D., *Commissioner of Health.*

DEAR SIR: — Your request for an interpretation of chapter 448 of the Acts of 1912, as relating to the authority of local boards of health over the manufacture, sale and care of ice cream, has been given consideration.

The statute referred to is an amendment of section 70 of chapter 56 of the Revised Laws, which chapter relates to the regulation of trade. The original section was not altered, except by adding another paragraph. This statute as amended is as follows: —

> Boards of health of cities and towns, by themselves, their officers or agents, may inspect the carcasses of all slaughtered animals and all meat, fish, vegetables, produce, fruit or provisions of any kind found in their cities or towns, and for such purpose may enter any building, enclosure or other place in which such carcasses or articles are stored, kept or exposed for sale. If, on such inspection, it is found that such carcasses or articles are tainted, diseased, corrupted, decayed, unwholesome or, from any cause, unfit for food, the board of health shall seize the same and cause it or them to be destroyed forthwith or disposed of otherwise than for food. All money received by the board of health for property disposed of as aforesaid shall, after deducting the expenses of said seizure, be paid to the owner of such property. If the board of health seizes or condemns any such carcass or meat for the reason that it is affected with a contagious disease, it shall immediately give notice to the board of cattle commissioners of the name of the owner or person in whose possession it was found, the nature of the disease and the disposition made of said meat or carcass.
>
> Boards of health of cities and towns may make and enforce reasonable rules and regulations, subject to the approval of the state board of health, as to the conditions under which all articles of food may be kept for sale or exposed for sale, in order to prevent contamination thereof and injury to the public health. Before the board of health of any city or town submits such rules and regulations to the state board of health for approval it shall hold a public hearing thereon, of which notice shall be given by publication for two successive weeks, the first publication to be at least fourteen days prior to the date of the hearing, in a newspaper published in such city or town, or, if none is so published, in a newspaper published in the county in which such city or town is located. Any person affected by such rules and regulations, in the form in which they are presented to the state board of health for approval, may appeal to the said board for a further hearing, and said board shall not grant its approval to rules and regulations concerning which such an appeal has been taken until it has held a public hearing thereon, advertised in the manner specified above in this section with reference to hearings before boards of health in cities and towns.

Naturally the question arises because the first paragraph of the section gives authority to the boards of health to inspect slaughtered animals, meat, fish, vegetables, produce, fruit or "provisions of any kind," while the added paragraph empowers such boards to make and enforce regulations as to the conditions under which all articles of food may be kept for sale, etc. Do the specific articles mentioned in the first paragraph of the section limit the words "all articles of food" in the last paragraph?

It has been held by a former Attorney-General that these words do not include milk, and therefore local boards of health have no authority, under this section, to make regulations dealing with that commodity. Sections 51 to 67, inclusive, of said chapter 56 of the Revised Laws are milk regulations, and the former Attorney-General was of the opinion that these sections dealt with the milk question so effectively that sections 70 to 76, inclusive, do not extend the authority of boards of health to milk, since the word "milk" was not used in the following sections. This ruling, however, was limited to milk, and very properly so.

Ice cream is not covered by the statute on regulation of trade, unless section 70, as amended, applies to this commodity. Ice cream may be classified under the head of "provisions," and it also comes within the definition of a food. Hence, I am of opinion that local boards of health may make and enforce rules and regulations governing the sale, etc., of ice cream, subject to the approval of the State Department of Health.

Very truly yours,

HENRY C. ATTWILL,
Attorney-General.

OPINION OF THE ATTORNEY-GENERAL RELATIVE TO THE ISSUANCE OF PERMITS FOR THE PRODUCTION AND SALE OF MILK.

THE COMMONWEALTH OF MASSACHUSETTS,
DEPARTMENT OF THE ATTORNEY-GENERAL,
BOSTON, March 22, 1915.

ALLAN MCLAUGHLIN, M.D., *Commissioner of Health.*

DEAR SIR: — An inquiry has been received from your department as to whether permits issued by boards of health under chapter 744 of the Acts of 1914 must be signed by the members of such boards, or if they may be signed "Board of Health, by John Doe, Agent."

In its primary sense a license or permit is a privilege conferred upon one or more persons which is not enjoyed by citizens generally, and therefore to "issue a license" is to confer special authority to perform certain acts. In its secondary sense a license or permit is a written document by which permission is conferred; but in my opinion this is not what is meant here.

The statute in question provides in part as follows: —

> SECTION 1. It shall be unlawful for any producer of milk or dealer in milk to sell or deliver for sale in any city or town in the commonwealth any milk produced or dealt in by him without first obtaining from the board of health of such city or town a permit authorizing such sale or delivery. Said boards of health are hereby authorized to issue such permits after an inspection, satisfactory to them, of the place in which and of the circumstances under which such milk is produced, has been made by them or by their authorized agent. . . .

It is clear that the purpose of the statute is to regulate the production and sale of milk in the interest of the public health, and boards of health are constituted the licensing tribunal. They may grant or refuse permission. The written permit which is subsequently issued is merely evidence of the authority under which the producer or dealer conducts his business. This may be signed by an authorized agent of a board as the act of the licensing body.

A not uncommon method of signing such permits or licenses, and one which would seem to apply to this case, is as follows: —

A. B.,
C. D.,
E. F.,
Board of Health of the City of X.
By G. H.,
Clerk of the Board.

The names of the members of the board of health may be printed, while the agent or clerk of the board should sign the license.

Very truly yours,

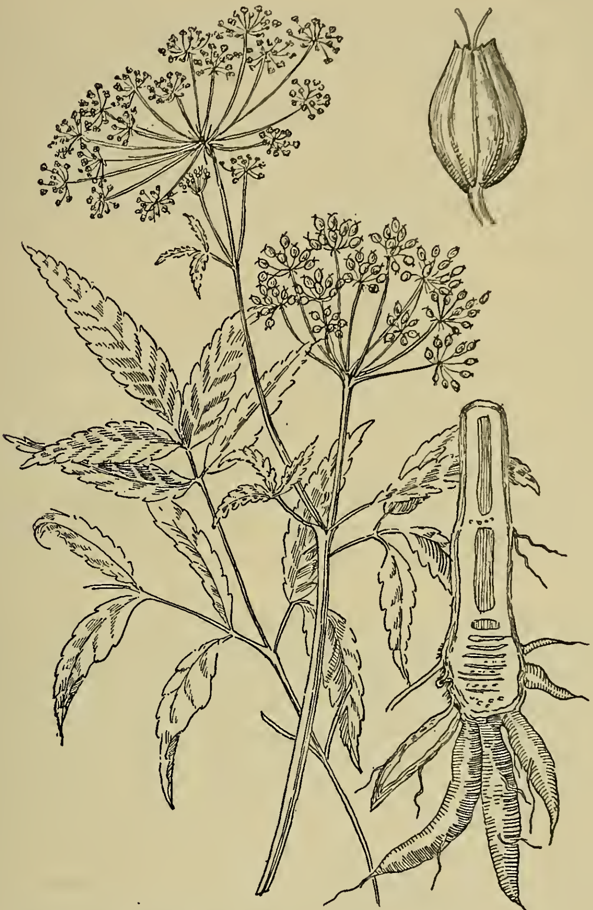
HENRY C. ATTWILL,
Attorney-General.

A CASE OF FATAL POISONING BY THE AMERICAN WATER HEMLOCK.

(*Cicuta maculata.*)

During the latter part of February, 1915, two men were cleaning out a swamp in Milford, Mass., about one mile from the farm where they worked, and while at work dug up and ate some roots of a plant, about one ounce being consumed by each man. On reaching the farm one of them was taken violently sick and went to bed. Their employer asked the other man why he did not assist the sick one and was promptly informed that he also was sick. Dr. William J. Clarke, medical examiner, Sixth Worcester District, was then called, and the man who was least sick was sent to the hospital, where, after application of the stomach pump, he recovered. The other man died. Symptoms: nausea, vomiting, vertigo, widely dilated pupils, convulsions, loss of consciousness, — passing into coma, muscular twitchings while in coma, rigor mortis coming very quickly; duration from ingestion about one hour.

The man who recovered went to the swamp and pointed out the roots from which they had eaten. Dr. Clarke obtained samples and submitted them to Ex-Senator George F. Birch of Milford who, being unable to identify them positively, brought them to the State Department of Health. They were next taken to Dr. Reid Hunt, pharmacologist at the Harvard Medical School, who prepared an extract from about 1 gram of the root, and from its action upon a frog declared that a poison of the picrotoxin or cicutoxin group was present, which caused peculiar and characteristic effects upon the frog, causing it to move in circles, to walk backwards, etc., and finally to have convulsions.



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The roots were then submitted, with the above statements, to Prof. M. L. Fernald of Harvard University, who reported them to be the tuberous roots of the spotted cowbane or beaver poison (*Cicuta maculata*), long known as a deadly poison. It is one of the commonest of our meadow and swale plants, and variously referred to as water hemlock, wild hemlock, cowbane, beaver poison, musquash root and muskrat weed. In several instances children have been fatally poisoned by eating its roots, which have been termed "children's bane." The plant is often erroneously referred to as "wild parsnip." It is closely allied to the less common and somewhat less virulent poison hemlock (*Conium maculatum*) with which Socrates was put to death. A related plant, *Sium cicutaefolium,* which grows with *Cicuta* or in similar habitats, has similar roots which were eaten by the Indians. In the winter and spring, when the roots are well filled, the Indians distinguished the two plants by the old stalks. The stems of *Cicuta,* the poisonous plant, are cylindric and quill like, those of *Sium* strongly corrugated or furrowed.

The roots of the American water hemlock consist of several oblong, fleshy tubers spreading out from the base of the stem. They are among the first green substances to appear in the spring, and are eaten chiefly by herbivorous animals. They are mistaken by human beings for parsnips, because of their odor and texture, artichokes, sweet cicely, horse-radish, or other edible roots.

In the Yearbook of the Department of Agriculture, 1896, the following case of poisoning caused by the American water hemlock is described by V. K. Chestnut: —

> At Boundbrook, N. J., in March, 1896, two boys and two girls, while returning from school for lunch, stopped to look at some workmen digging a ditch. One of the girls spied some water-hemlock roots which had been thrown out of the ditch and which she took to be horse-radish. More were soon found by the others, and as they proved somewhat agreeable to the taste all ate of them to a greater or less extent. After arriving home, but before finishing luncheon, one of the girls was taken violently ill with dizziness and nausea, and was soon in convulsions. A physician was summoned immediately, but the girl died shortly after his arrival. The others were affected in the same way but not so violently, and they were finally saved by skillful treatment. The species was determined from specimens sent to the Department of Agriculture and from plants grown from these roots.

THE AMERICAN SOCIAL HYGIENE ASSOCIATION.

The work of this association is directed to the promotion and guidance of sex education, the establishment of a single standard of morals, and the suppression of prostitution and its attendant evils, — venereal disease, mental and moral degeneracy, and economic waste. The association believes that the problems involved cannot be successfully attacked without thorough knowledge of their causes, extent and relation to other social problems. It seeks to be guided by reason and the facts, and desires the co-operation of all those who strive for social and moral progress.

The American Social Hygiene Association has been offered a prize of $1,000 by the Metropolitan Life Insurance Company to be awarded to the author of the best original pamphlet on social hygiene for adolescents between the ages of twelve and sixteen years, approved by a committee of judges to be selected by the association.

Competition for this prize is open to all.

The Metropolitan Life Insurance Company desires to use the winning pamphlet among its industrial policy holders.

The committee of judges will conduct the competition in accordance with the following conditions: —

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Manuscripts must be typewritten on one side only of plain white paper 8 by 10½ inches.

Manuscripts must be paragraphed and punctuated for submission as "copy" to printer.

Each manuscript must bear some identifying mark or pen-name, but not the name of the author.

The author's name and address, and the identifying mark or pen-name, should be in a sealed envelope accompanying the manuscript; the face of the envelope should bear the mark or pen-name only.

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PUBLIC HEALTH BULLETIN

ISSUED MONTHLY

BY THE

STATE DEPARTMENT OF HEALTH

OF MASSACHUSETTS

MARCH, 1915

Vol. 2, No. 3

Entered as Second-class Matter Oct. 26, 1914, at the Post Office at Boston, Mass., under the Act of Aug. 24, 1912

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Approved by
The State Board of Publication.

PUBLIC HEALTH BULLETIN.

REPORT UPON THE WORK OF THE BACTERIOLOGICAL LABORATORY FOR THE MONTH OF MARCH, 1915.

The following gives the total number of biological products and diagnostic outfits distributed by the bacteriological laboratory of the State Department of Health during the month of March, 1915: —

Biological Products.

Diphtheria antitoxin: —	
4,000 units (special for the Boston City Hospital),	1,372 bottles.
3,000 units,	4,393 bottles.
1,500 units,	824 bottles.
750 units,	920 bottles.
Smallpox vaccine,	3,809 tubes.
Typhoid vaccine,	1,324 ampoules.
Antimeningitis serum,	114 bottles.
Silver nitrate solution,	262 droppers.

Diagnostic Outfits.

Culture tubes,	636
Sputum bottles,	385
Widal outfits,	360
Bile outfits,	74
Malaria outfits,	9

The following gives the total number of bacteriological examinations made in the laboratory of the State Department of Health during the month of March, 1915: —

	Number of Examinations.	Diagnosis.		Release.	
		Positive.	Negative.	Positive.	Negative.
Diphtheria,	559	77	258	85	139

	Number of Examinations.	Positive.	Negative.	*Atypical.
Tuberculosis, ...	241	55	186	
*Typhoid fever (Widal test), .	228	29	190	9
Typhoid fever (culture test), .	41	–	41	
*Paratyphoid fever, . .	8	–	8	–
Malaria, ...	4	–	4	
Miscellaneous, . . .	130	–	–	

Total number of examinations made, 1,211.

FOOD AND DRUGS.

The following tables present the results of the laboratory examinations of samples of food and drugs collected during the month of March, 1915: —

The cities and towns in which samples were collected were: Abington, Acton, Adams, Agawam, Amesbury, Attleboro, Beverly, Blackstone, Boston, Brookline, Cambridge, Chatham, Chelsea, Fitchburg, Framingham, Franklin, Gardner, Gloucester, Hudson, Lawrence, Lowell, Lynn, Marblehead, Marlborough, Medford, Melrose, Millbury, Natick, Newburyport, North Adams, Northampton, Norwood, Orleans, Peabody, Pittsfield, Revere, Richmond, Salem, Sherborn, Springfield, Stoneham, Stoughton, Taunton, Walpole, Waltham, Watertown, Wellesley, West Springfield, Westfield, Winchester, Winthrop, Woburn and Worcester.

SUMMARY OF ANALYSES.

ARTICLES EXAMINED.	Number found to be of Good. Quality.	Number adulterated or varying from the Legal Standard.	Total.
Baker's supplies, ...	16	–	16
Bread, ...	13	–	13
Broken out eggs,[1]	27	30	57
Butter, ...	2	–	2
Canned goods, ...	2	–	2
Cocoa, ...	3	–	3
Coffee substitute, ...	–	3	3
Condimental sauces, ...	5	–	5
Confectionery, ...	7	–	7
Cream, ...	11	–	11
Cream of tartar, ...	1	–	1
Drugs, ...	85	16	101
Eggs, ...	17	–	17
Fish, ...	3	–	3

[1] Taken from cold storage.

SUMMARY OF ANALYSES — *Concluded.*

ARTICLES EXAMINED.	Number found to be of Good Quality.	Number adulterated or varying from the Legal Standard.	Total.
Flavoring extracts: —			
Lemon,	–	1	1
Peppermint,	2	1	3
Flour,	2	–	2
Fruit juices: —			
Cranberry,	1	–	1
Ice cream,	3	–	3
Jams and jellies,	3	2	5
Lard,	36	8	44
Maple sugar,	8	2	10
Maple syrup,	2	–	2
Meat products: —			
Hamburg steak,	5	–	5
Mince meat,	1	–	1
Sausages,	44	6	50
Veal,	1	–	1
Milk,	536	153	689
Molasses,	–	1	1
Olive oil,	14	4	18
Scallops,	7	6	13
Shrimp,	6	–	6
Spices,	3	–	3
Syrups,	2	–	2
Vinegar,	3	1	4
Totals,	871	234	1,105

PROSECUTIONS FOR VIOLATIONS OF THE LAW RELATING TO FOOD AND DRUGS.

Twenty-four convictions were secured during the month of March, 1915, for the sale of adulterated food and drugs, and for violation of the cold-storage laws, as follows: —

NAME OF DEFENDANT.	Place.	Character of Articles sold or Nature of Offence.
Louis Handverger,	Franklin,	Milk (total solids, 11.56).[1]
Simon Jegelwicz,	Westfield,	Lard (compound; not marked as such).
Bay State Packing Company,	Boston,	Sausages (contained starch in excess of 2 per cent.).
Simon Jegelwicz,	Westfield,	Sausages (contained starch in excess of 2 per cent.).[2]
Parks Sausage and Provision Company.	Boston,	Sausages (contained starch in excess of 2 per cent.).
Carl A. Weitz,	Boston,	Sausages (contained starch in excess of 2 per cent. and coloring matter).
M. Zimmerman Company,	Boston,	Sausages (contained starch in excess of 2 per cent.).
Joseph Catalanotti,	Boston,	Shrimp (decomposed).
Cassius Hunt Company,	Boston,	Shrimp (contained borax).
John Mantia,	Boston,	Shrimp (decomposed).
Thomas J. Donovan,	Salem,	Spirit of anise (not U. S. P.).[2]

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[1] Watered.

[2] Appealed.

NAME OF DEFENDANT.	Place.	Character of Article sold or Nature of Offence.
L. Emile Robillard,	Gardner,	Spirit of anise (not U. S. P.).
George E. Judson,	Westfield,	Spirit of camphor (not U. S. P.).
Emanuel Macaluso,	Boston,	Spirit of nitre (not U. S. P.).
Earl L. Sargent,	Beverly,	Spirit of peppermint (not U. S. P.).
Emanuel Macaluso,	Boston,	Tincture of iodine (not U. S. P.).
Sidney Button,	North Adams,	Cold storage sign not displayed.
Fugere & Co., Inc.,	Salem,	Cold storage sign not displayed.
Oliver King,	Adams,	Cold storage sign not displayed.
Simon Kronick,	North Adams,	Cold storage sign not displayed.
M. O'Keeffe, Inc.,	Salem,	Cold storage sign not displayed.
Anoclato Perroni,	North Adams,	Cold storage sign not displayed.
Wogciech Prejsner,	Adams,	Cold storage sign not displayed.
Louis Simon,	North Adams,	Cold storage sign not displayed.

Fines imposed, $335.

COLD STORAGE OF FOOD.

Articles in Cold Storage condemned, upon Physical and Chemical Examinations, as unfit for Food.

Date.	ARTICLES.	Weight (Pounds).	Reasons.	Disposition.
Mar. 1, 1915	Beef trimmings,	209	Decomposed,	Rendered.
Mar. 3, 1915	Beef,	178	Decomposed,	Incinerated.
Mar. 5, 1915	Ducks,	775	Decomposed,	Rendered.
Mar. 16, 1915	Canned eggs,	1,504	Decomposed,	Rendered.
Mar. 16, 1915	Chickens,	662	Decomposed,	Rendered.
Mar. 22, 1915	Canned eggs,	2,027	Decomposed,	Rendered.
Mar. 23, 1915	Canned eggs,	350	Decomposed,	Rendered.
Mar. 23, 1915	Beef trimmings,	1,750	Decomposed,	Rendered.
Mar. 29, 1915	Canned eggs,	900	Decomposed,	Rendered.
Mar. 31, 1915	Canned eggs,	300	Decomposed,	Rendered.
Total,		8,655		

SAMPLES OF FOOD WHICH UPON EXAMINATION WERE FOUND TO BE ADULTERATED.

COFFEE SUBSTITUTE.

Contained 15 Per Cent. Chicory; Per Cent. not stated.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
27007	Oriental Tea Company, Lawrence.	
27173	Oriental Tea Company, Lawrence.	
79-T	V. Scalli, Boston.	

SAMPLES OF FOOD WHICH UPON EXAMINATION WERE FOUND TO BE ADULTERATED — *Continued.*

FLAVORING EXTRACTS.

Lemon (deficient in Lemon Oil).

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
263–T	Tea Store, Washington Street, Roxbury, . .	M. E. Sawyer, Revere.

Peppermint (deficient in Peppermint Oil).

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
265–T	Tea Store, Washington Street, Roxbury, . .	M. E. Sawyer, Revere.

JAMS AND JELLIES.

Apple Corn Starch Jelly (contained Benzoic Acid).

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
646–A	John F. Saunders, Lowell.	

Lemon Pie Filling (contained Benzoic Acid).

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
644–A	John F. Saunders, Lowell.	

LARD.

Compound; not marked as such.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
26946	Klondos Market, Lawrence.	
26947	Lawrence Street Market, Lawrence.	
536–A	Store, 68 Amesbury Street, Lawrence.	
27012	Grocery Store, 64 Franklin Street, Lawrence.	
26949	Grocery Store, 295 Oak Street, Lawrence.	
26948	Grocery Store, Amesbury and School streets, Lawrence.	
590–A	Store, 121 Main Street, Springfield.	
26997	Grocery Store, 458 Worthington Street, Springfield.	

MAPLE SUGAR.

Contained Cane Sugar.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
26886	M. Phelan, Waltham.	
307–T	C. B. Romani & Co., Westfield.	

OLIVE OIL.

Contained Cottonseed Oil.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
279–T	Greek Store, Walnut Street, Peabody.	
822–A	Store, 26 Walnut Street, Peabody.	
824–A	Store, 59 Walnut Street, Peabody.	
277–T	Peter Routhes, Peabody.	

SAMPLES OF FOOD WHICH UPON EXAMINATION WERE FOUND TO BE ADULTERATED — *Concluded.*

SAUSAGES.

Contained Starch in Excess of 2 Per Cent.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
27176	Lawrence Market, Lawrence.	
233-T	J. Prenguber, North Adams.	
235-T	J. Prenguber, North Adams.	
648-A	John F. Saunders, Lowell.	
193-T	Saunder's Market, Lowell.	
227-T	Worth Street, Pittsfield.	

Contained Coloring Matter.

233-T	J. Prenguber, North Adams.	

SCALLOPS.

Contained added Water.

295-T	Chester N. Cahoon, West Chatham.	
291-T	Tileston F. Cahoon, West Chatham.	
139-T	Central Fish Market, Beverly, ...	Joseph A. Rich, Boston.
209-T	Cyrus A. Eldridge, West Chatham.	
207-T	E. H. Higgins, South Orleans.	
289-T	Marshall Johnson & Son, Boston.	

CIDER VINEGAR.

Low in Solids and Acid.

27006	Grocery Store, 57 Franklin Street, Lawrence.	

SAMPLES OF DRUGS WHICH UPON EXAMINATION WERE FOUND TO BE ADULTERATED.

SPIRIT OF ANISE.

Number of Sample.	DEALER.	Wholesaler or Manufacturer.	Per Cent. of Required Strength.
790-A	Walter L. Conwell, Boston, ...	– –	59

SPIRIT OF CAMPHOR.

26951	Healey's Pharmacy, Lawrence, ...	– –	75
27002	N. E. Melville, Lawrence, ...	– –	85
610-A	J. A. McGinty, Springfield, ...	– –	65
27234	J. A. McGinty, Springfield, ...	– –	65

SAMPLES OF DRUGS WHICH UPON EXAMINATION WERE FOUND TO BE ADULTERATED — *Concluded.*

SPIRIT OF NITRE.

Number of Sample.	DEALER.	Wholesaler or Manufacturer.	Per Cent. of Required Strength.
894–A	Main St. Pharmacy, Peabody, ...	– –	59
27126	Pike & Company, Attleboro, ...	Geo. L. Claflin Company, Providence, R. I., . .	35

SPIRIT OF PEPPERMINT.

Number of Sample.	DEALER.	Wholesaler or Manufacturer.	Per Cent. of Required Strength.
554–A	G. W. Bradshaw, Lawrence, ...	– –	80
26952	Healey's Pharmacy, Lawrence, ...	– –	68
26998	Healey's Pharmacy, Lawrence, ...	– –	74
612–A	J. A. McGinty, Springfield, ...	– –	60
27233	J. A. McGinty, Springfield, ...	– –	60

TINCTURE OF IODINE.

Number of Sample.	DEALER.	Wholesaler or Manufacturer.	Per Cent. of Required Strength.
27068	Beaconsfield Pharmacy, Brookline, . . .	– –	72
q 15581	J. R. Bigelow, Blackstone, ...	– –	52

SAMPLES OF MILK WHICH UPON EXAMINATION WERE FOUND TO BE ADULTERATED.

Number of Sample.	Name of Dealer, Wholesaler or Producer.	Results of Analyses.
906–A	George Bloom, West Acton, . . .	Total solids, 10.06 per cent.; fat, 2.90 per cent.; contained added water.
908–A	George Bloom, West Acton, . . .	Total solids, 10.62 per cent.; fat, 3.10 per cent.; contained added water.
910–A	George Bloom, West Acton, . . .	Total solids, 11.00 per cent.; fat, 4.00 per cent.; contained added water.
912–A	George Bloom, West Acton, . . .	Total solids, 11.04 per cent.; fat, 3.50 per cent.; contained added water.
914–A	George Bloom, West Acton, . . .	Total solids, 10.88 per cent.; fat, 3.30 per cent ; contained added water.
916–A	George Bloom, West Acton, . . .	Total solids, 10.64 per cent.; fat, 3.20 per cent.; contained added water.
918–A	George Bloom, West Acton, . . .	Total solids, 11.26 per cent.; fat, 3.45 per cent.; contained added water.
920–A	George Bloom, West Acton, . . .	Total solids, 11.12 per cent.; fat, 3.35 per cent.; contained added water.
922–A	George Bloom, West Acton, . . .	Total solids, 9.42 per cent.; fat, 2.80 per cent.; contained added water.
924–A	George Bloom, West Acton, . . .	Total solids, 11.20 per cent.; fat, 3.50 per cent.; contained added water.
998–A	James Dorton, Springfield, . . .	Total solids, 10.54 per cent.; fat, 1.70 per cent.; proteins, 3.27 per cent.; skimmed milk.
27254	Harris Goldberg, West Springfield, .	Total solids, 9.80 per cent.; fat, 2.90 per cent.; contained added water.
27255	Harris Goldberg, West Springfield, .	Total solids, 10.62 per cent.; fat, 2.70 per cent.; contained added water.
27257	Harris Goldberg, West Springfield, .	Total solids, 9.84 per cent.; fat, 2.40 per cent.; contained added water.
27259	Harris Goldberg, West Springfield, .	Total solids, 11.10 per cent.; fat, 3.10 per cent.; contained added water.

Samples of Milk which upon Examination were found ot be adulterated — *Concluded.*

Number of Sample.	Name of Dealer, Wholesaler or Producer.	Results of Analyses.
27260	Harris Goldberg, West Springfield,	Total solids, 10.76 per cent.; fat, 2.60 per cent.; contained added water.
27261	Harris Goldberg, West Springfield,	Total solids, 11.50 per cent.; fat, 3.60 per cent.; contained added water.
27262	Harris Goldberg, West Springfield,	Total solids, 10.14 per cent.; fat, 2.70 per cent.; contained added water.
27263	Harris Goldberg, West Springfield,	Total solids, 11.52 per cent.; fat, 3.40 per cent.; contained added water.
q 15529	Louis Handverger, Franklin,	Total solids, 12.00 per cent.; fat, 4.10 per cent.; contained added water.
q 15530	Louis Handverger, Franklin,	Total solids, 11.50 per cent.; fat, 3.60 per cent.; contained added water.
q 15531	Louis Handverger, Franklin,	Total solids, 11.56 per cent.; fat, 4.20 per cent.; contained added water.
27195	D. B. Harding & Son, Gloucester,	Total solids, 9.84 per cent.; fat, 2.80 per cent.; contained added water.
27196	D. B. Harding & Son, Gloucester,	Total solids, 9.72 per cent.; fat, 2.70 per cent.; contained added water.
27197	D. B. Harding & Son, Gloucester,	Total solids, 9.74 per cent.; fat, 2.90 per cent.; contained added water.
27198	D. B. Harding & Son, Gloucester,	Total solids, 9.66 per cent.; fat, 2.90 per cent.; contained added water.
q 15631	Arthur Higgins, North Abington,	Total solids, 11.78 per cent.; fat, 2.20 per cent.; proteins, 3.85 per cent.; skimmed milk.
27153	A. Hubbard & Son, Gloucester,	Total solids, 10.60 per cent.; fat, 3.10 per cent.; contained added water.
27154	A. Hubbard & Son, Gloucester,	Total solids, 10.52 per cent.; fat, 3.10 per cent.; contained added water.
712–A	Henry Leary, Hudson,	Total solids, 11.10 per cent.; fat, 2.20 per cent.; proteins, 2.95 per cent.; skimmed milk.
q 15633	E. F. Manley, North Abington,	Total solids, 10.86 per cent.; fat, 1.95 per cent.; proteins, 3.35 per cent.; skimmed milk.
q 15587	Thomas F. McGahan, Blackstone,	Total solids, 10.18 per cent.; fat, 1.50 per cent.; skimmed milk.
27158	W. S. O'Brien, Gloucester,	Total solids, 9.88 per cent.; fat, 2.30 per cent.; contained added water.
27159	W. S. O'Brien, Gloucester,	Total solids, 10.30 per cent.; fat, 3.00 per cent.; contained added water.
27122	F. S. Perry & Son, Attleboro,	Total solids, 12.80 per cent.; fat, 5.40 per cent.; contained added water.
27267	Arthur Randall, Agawam,	Total solids, 11.86 per cent.; fat, 3.00 per cent.; proteins, 3.13 per cent.; skimmed milk.
27279	Arthur Randall, Agawam,	Total solids, 11.86 per cent.; fat, 2.65 per cent.; proteins, 3.18 per cent.; skimmed milk.
27280	Arthur Randall, Agawam,	Total solids, 11.64 per cent.; fat, 2.90 per cent.; proteins, 2.94 per cent.; skimmed milk.
27281	Arthur Randall, Agawam,	Total solids, 11.60 per cent.; fat, 2.90 per cent.; proteins, 3.12 per cent.; skimmed milk.
512–A	Albert A. Rice, Framingham,	Total solids, 12.64 per cent.; fat, 2.80 per cent.; proteins, 3.58 per cent.; skimmed milk.
27043	Zandin Brothers, Springfield,	Total solids, 11.86 per cent.; fat, 2.70 per cent.; proteins, 3.21 per cent.; skimmed milk.

REPORT OF INSPECTION OF DAIRIES.

Owing to the continuance of foot-and-mouth disease among cattle in a number of towns in the State, the regular inspection of dairies was not resumed during the month of March, 1915.

RETURNS OF DISEASES.

Cases of Diseases declared by the State Department of Health to be Dangerous to the Public Health.

[Under the provisions of section 52 of chapter 75 of the Revised Laws.]

DISEASES.	Week ending —				
	Mar. 6.	Mar. 13.	Mar. 20.	Mar. 27.	Total.
Actinomycosis,	–	–	2	–	2
Anterior poliomyelitis,	3	1	3	–	7
Cerebro-spinal meningitis,	1	5	4	1	11
Chicken-pox,	144	152	173	160	629
Diphtheria,	169	183	178	173	723
Dog-bite,	2	7	3	7	19
Dysentery,	–	–	1	–	1
German measles,	12	6	14	21	53
Infectious diseases of the eye: —					
Ophthalmia neonatorum,	62	56	53	68	239
Suppurative conjunctivitis,	8	7	5	7	27
Trachoma,	4	–	1	1	6
Malaria,	1	1	–	1	3
Measles,	527	680	634	799	2,640
Mumps,	50	95	68	92	305
Scarlet fever,	201	203	219	217	840
Septic sore throat,	6	15	16	12	49
Tetanus,	1	–	2	2	5
Tuberculosis, pulmonary,	158	176	180	157	671
Tuberculosis, other forms,	16	3	19	18	56
Tuberculous meningitis,	2	2	4	2	10
Typhoid fever,	27	29	17	31	104
Whooping cough,	100	161	145	124	530

RETURNS OF DEATHS.

WEEKLY RETURNS OF DEATHS FROM DISEASES DECLARED BY THE STATE DEPARTMENT OF HEALTH TO BE DANGEROUS TO THE PUBLIC HEALTH IN CITIES AND TOWNS IN MASSACHUSETTS.

[Under the provisions of chapter 210, Acts of 1913.]

Week ending March 6, 1915.

CITIES AND TOWNS.	Population. Census for 1910.	Anterior Poliomyelitis.	Cerebro-spinal Meningitis.	Diphtheria.	Measles.	Scarlet Fever.	Septic Sore Throat.	Tetanus.	Tuberculosis (Pulmonary or not classified).	Tuberculosis (Other Forms).	Typhoid Fever.	Whooping Cough.
Boston,	686,092	–	–	3[1]	2	2	–	–	25[1]	1	2	1
Worcester,	145,986	–	–	1	–	–	–	–	6	1	–	1
Fall River,	119,295	–	–	2	1	–	–	–	3	–	–	–
Lowell,	106,294	–	1	–	–	–	–	–	1	–	–	–
Cambridge,	104,839	–	–	–	–	–	–	–	3	1	–	–
New Bedford,	96,652	–	–	–	–	–	–	–	5	1	–	–
Lynn,	89,336	–	–	1	–	–	–	–	2	2	–	–
Springfield,	88,926	–	–	–	–	–	–	–	2	1	–	–
Lawrence,	85,892	–	–	–	–	–	–	–	–	–	–	–
Somerville,	77,236	–	–	–	–	–	–	–	1	1	–	–
Holyoke,	57,730	–	–	–	1	–	–	–	–	–	–	–
Brockton,	56,878	–	–	1	–	–	–	–	1	–	1	–
Malden,	44,404	–	–	–	1	–	–	–	1	–	–	–
Haverhill,	44,115	–	–	–	–	–	–	–	–	–	–	–
Salem,	43,697	–	–	–	–	–	–	–	–	–	–	–
Newton,	39,806	–	–	1	–	–	–	–	1	1	–	1
Fitchburg,	37,826	–	–	–	–	–	–	–	–	–	–	–
Taunton,	34,259	–	–	–	–	–	–	–	1	–	–	–
Everett,	33,484	–	–	–	1	–	–	–	1	–	–	–
Quincy,	32,642	–	–	–	–	–	–	–	–	–	–	–
Chelsea,	32,452	–	–	–	–	–	–	–	–	–	–	–

Pittsfield,	32,121	–	–	–	–	–	–	–	1	–	–	–
Waltham,	27,834	–	–	–	–	1	–	–	1	–	–	–
Brookline,	27,792	–	–	–	–	–	–	–	–	–	–	–
Chicopee,	25,401	–	–	1	–	–	–	–	1	–	–	1
Gloucester,	24,398	–	–	–	–	–	–	–	–	–	–	–
Medford,	23,150	–	–	–	–	–	–	–	2	1	–	–
North Adams,	22,019	–	–	–	–	–	–	–	1	–	–	–
Northampton,	19,431	–	–	–	–	–	–	–	–	–	–	–
Beverly,	18,650	–	–	–	–	–	–	–	–	–	–	–
Revere,	18,219	–	–	–	–	–	–	–	–	–	–	–
Leominster,	17,580	–	–	–	–	–	–	–	–	–	–	–
Attleboro,	16,215	–	–	–	–	–	–	–	–	–	–	–
Westfield,	16,044	–	–	–	–	–	–	–	3[2]	–	–	–
Peabody,	15,721	–	–	1	–	–	–	–	–	–	–	–
Melrose,	15,715	–	–	–	–	–	–	–	–	–	–	–
Woburn,	15,308	–	–	–	–	–	–	–	–	–	–	–
Newburyport,	14,949	–	–	–	–	–	–	–	–	–	–	–
Gardner,	14,699	–	–	–	–	–	–	–	–	–	–	–
Marlborough,	14,579	–	–	–	–	–	–	–	–	–	–	–
Clinton,	13,075	–	–	–	–	–	–	–	–	–	–	–
Milford,	13,055	–	–	–	–	–	–	–	–	–	–	–
Adams,	13,026	–	–	–	–	–	–	–	–	–	–	–
Framingham,	12,948	–	–	–	–	–	–	–	–	–	–	–
Weymouth,	12,895	–	–	–	–	–	–	–	–	–	–	–
Watertown,	12,875	–	–	–	–	–	–	–	–	1	–	–
Southbridge,	12,592	–	–	–	–	–	–	–	1	–	–	–
Plymouth,	12,141	–	–	–	–	–	–	–	–	–	–	–
Webster,	11,509	–	–	–	–	–	–	–	–	–	–	–
Methuen,	11,448	–	–	–	–	–	–	–	–	–	–	–
Wakefield,	11,404	–	–	–	–	–	–	–	1	–	–	–
Arlington,	11,187	–	–	–	–	–	–	–	–	–	–	–
Greenfield,	10,427	–	–	–	–	–	–	–	–	–	–	–
Winthrop,	10,132	–	–	1	–	–	–	–	–	–	–	–
Total of reporting cities and towns of more than 10,000 population,	1,966,231	–	1	12	6	3	–	–	64	11	3	4
Great Barrington,	5,926	–	–	–	–	–	–	1	–	–	–	–
Warren,	4,188	–	–	–	–	–	–	–	1	–	–	–
Total of reporting towns of less than 10,000 population,	10,114	–	–	–	–	–	–	1	1	–	–	–

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[1] One nonresident.

[2] Two nonresidents.

Week ending March 13, 1915.

CITIES AND TOWNS.	Population. Census for 1910.	Anterior Poliomyelitis.	Cerebro-spinal Meningitis.	Diphtheria.	Measles.	Scarlet Fever.	Septic Sore Throat.	Tetanus.	Tuberculosis (Pulmonary or not classified).	Tuberculosis (Other Forms).	Typhoid Fever.	Whooping Cough.
Boston,	686,092	–	1	5[1]	1	4	–	–	20[2]	2	–	–
Worcester,	145,986	–	–	–	–	–	–	–	3	3	–	–
Fall River,	119,295	–	–	2	–	–	–	–	3	–	–	1
Lowell,	106,294	–	–	1	–	–	–	–	2	1	1	–
Cambridge,	104,839	–	–	–	–	–	–	–	3	1	–	–
New Bedford,	96,652	–	–	1	–	–	–	–	3	–	–	–
Lynn,	89,336	–	–	–	–	–	–	–	1	–	–	–
Springfield,	88,926	–	–	–	–	–	–	–	–	1	1	–
Lawrence,	85,892	–	–	–	–	–	–	–	–	–	–	–
Somerville,	77,236	–	–	1	–	–	–	–	2	–	–	–
Holyoke,	57,730	–	–	–	–	–	–	–	1	–	–	–
Brockton,	56,878	–	–	–	–	–	–	–	1	–	–	–
Malden,	44,404	–	–	–	–	–	–	–	1	–	–	–
Haverhill,	44,115	–	–	–	–	2	–	–	–	–	–	–
Salem,	43,697	–	–	–	–	–	–	–	–	–	–	–
Newton,	39,806	–	–	–	–	–	–	–	1	–	–	–
Fitchburg,	37,826	–	–	1	–	–	–	–	1	–	–	1
Taunton,	34,259	–	–	–	–	–	–	–	–	–	–	1
Everett,	33,484	–	–	1	–	–	–	–	–	1	–	–
Quincy,	32,642	–	–	–	–	–	–	–	–	–	–	–
Chelsea,	32,452	–	–	–	–	1	–	–	–	–	–	–
Pittsfield,	32,121	–	–	–	2	–	–	–	1	–	–	–
Waltham,	27,834	–	–	–	–	–	–	–	–	1	–	1
Brookline,	27,792	–	–	–	–	–	–	–	–	–	–	–
Chicopee,	25,401	–	–	–	–	–	–	–	1	–	–	1
Gloucester,	24,398	–	–	–	–	–	–	–	–	–	–	–
Medford,	23,150	–	–	–	–	–	–	–	–	–	–	–
North Adams,	22,019	–	–	–	–	–	–	–	–	–	–	–
Northampton,	19,431	–	–	–	–	–	–	–	–	1	–	–
Beverly,	18,650	–	–	–	–	–	–	–	–	–	–	–
Revere,	18,219	–	–	–	–	–	–	–	–	–	–	–
Leominster,	17,580	–	–	1	–	–	–	–	–	–	–	–

Attleboro,	16,215	–	–	–	–	–	–	–	–	–	–	–
Westfield,	16,044	–	–	–	–	–	–	–	1[1]	–	–	–
Peabody,	15,721	–	–	–	–	–	–	–	1	–	–	–
Melrose,	15,715	–	–	–	–	–	–	–	1	–	–	–
Woburn,	15,308	–	–	–	–	–	–	–	–	–	–	–
Newburyport,	14,949	–	–	–	–	–	–	–	1	–	–	–
Gardner,	14,699	–	–	–	–	–	–	–	–	–	–	–
Marlborough,	14,579	–	–	–	–	–	–	–	–	–	–	–
Clinton,	13,075	–	–	–	–	–	–	–	–	–	–	–
Milford,	13,055	–	–	–	–	–	–	–	–	–	–	–
Adams,	13,026	–	–	–	–	–	–	–	–	–	–	–
Framingham,	12,948	–	–	–	–	–	–	–	–	–	–	–
Weymouth,	12,895	–	–	–	–	–	–	–	–	–	–	–
Watertown,	12,875	–	–	–	–	–	–	–	–	–	–	–
Southbridge,	12,592	–	–	–	–	–	–	–	–	–	–	–
Plymouth,	12,141	–	–	–	–	–	–	–	–	–	–	–
Webster,	11,509	–	–	–	–	–	–	–	–	–	–	–
Methuen,	11,448	–	–	–	–	–	–	–	–	–	–	–
Wakefield,	11,404	–	–	–	–	–	–	–	–	–	–	–
Arlington,	11,187	–	–	–	–	–	–	–	–	–	–	–
Greenfield,	10,427	–	–	–	–	–	–	–	–	–	–	–
Winthrop,	10,132	–	–	1	–	–	–	–	–	–	–	–
Total of reporting cities and towns of more than 10,000 population,	2,090,538	–	1	14	3	7	–	–	48	11	2	5
North Attleborough,	9,562	–	–	1	–	–	–	–	1	–	–	–
Saugus,	8,047	–	–	–	–	–	–	–	1	–	–	–
Great Barrington,	5,926	–	–	–	–	–	–	–	1	–	–	–
Mansfield,	5,183	–	–	–	–	–	–	–	1	–	–	–
Walpole,	4,892	–	–	–	–	–	–	–	1	–	–	–
Wareham,	4,102	–	1	–	–	–	–	–	–	–	–	–
Total of reporting towns of less than 10,000 population,	37,712	–	1	1	–	–	–	–	5	–	–	–

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[1] One nonresident.

[2] Three nonresidents.

Week ending March 20, 1915.

CITIES AND TOWNS.	Population. Census for 1910.	Anterior Poliomyelitis.	Cerebro-spinal Meningitis.	Diphtheria.	Measles.	Scarlet Fever.	Septic Sore Throat.	Tetanus.	Tuberculosis (Pulmonary or not classified).	Tuberculosis (Other Forms).	Typhoid Fever.	Whooping Cough.
Boston,	686,092	1	–	3	–	2^{1}	–	–	30^{2}	3^{1}	2^{1}	1
Worcester,	145,986	–	–	1	–	–	–	–	3	2	–	–
Fall River,	119,295	–	–	2	1	1	–	–	4	–	–	2
Lowell,	106,294	–	1	–	–	–	–	–	1	–	1	–
Cambridge,	104,839	–	–	2	–	1	–	–	8	2	–	–
New Bedford,	96,652	–	–	1	–	2	–	–	3	–	–	–
Lynn,	89,336	–	–	1	–	–	–	–	–	–	–	–
Springfield,	88,926	–	–	–	–	–	–	–	–	1	–	–
Lawrence,	85,892	–	–	–	–	–	–	–	–	–	–	–
Somerville,	77,236	–	–	1	–	1	–	–	2	–	–	–
Holyoke,	57,730	–	–	1	–	–	–	–	2	–	–	–
Brockton,	56,878	–	–	–	–	–	–	–	1	4	–	–
Malden,	44,404	–	–	1	–	–	–	–	3	–	–	–
Haverhill,	44,115	–	–	–	–	–	–	–	–	–	–	–
Salem,	43,697	–	–	–	–	–	–	–	–	–	–	–
Newton,	39,806	–	–	–	–	–	–	–	1	–	–	–
Fitchburg,	37,826	–	–	1	–	–	–	–	–	–	–	–
Taunton,	34,259	–	–	–	–	–	–	–	2	–	–	–
Everett,	33,484	–	–	–	–	–	–	–	1	–	–	–
Quincy,	32,642	–	–	–	–	–	–	–	–	–	–	–
Chelsea,	32,452	–	–	–	–	–	–	–	1	–	–	–
Pittsfield,	32,121	–	–	–	–	–	–	–	–	–	–	–
Waltham,	27,834	–	–	–	–	–	–	–	–	–	–	–
Brookline,	27,792	–	–	–	–	–	–	–	–	–	–	–
Chicopee,	25,401	–	–	–	–	–	–	–	2	–	–	–
Gloucester,	24,398	–	–	–	–	–	–	–	–	–	–	–
Medford,	23,150	–	–	–	–	–	–	–	–	–	–	–
North Adams,	22,019	–	–	–	–	–	–	–	–	–	–	–
Northampton,	19,431	–	–	–	–	–	–	–	1	–	–	–
Beverly,	18,650	–	–	–	–	–	–	1	1	–	–	–
Revere,	18,219	–	–	–	–	–	–	–	–	–	–	–
Leominster,	17,580	–	–	–	–	–	–	–	–	–	–	–

Attleboro,	16,215	-	-	-	-	-	-	-	-	-	-	-
Westfield,	16,044	-	-	-	-	-	-	-	2[1]	-	-	-
Peabody,	15,721	-	-	-	-	-	-	-	1	-	-	-
Melrose,	15,715	-	-	-	-	-	-	-	-	-	-	-
Woburn,	15,308	-	-	-	-	-	-	-	-	-	-	-
Newburyport,	14,949	-	-	-	-	-	-	-	-	-	-	-
Gardner,	14,699	-	-	-	-	-	-	-	-	-	-	-
Marlborough,	14,579	-	-	-	-	-	-	-	-	-	-	-
Clinton,	13,075	-	-	-	-	-	-	-	-	-	-	-
Milford,	13,055	-	-	-	-	-	-	-	-	-	-	-
Adams,	13,026	-	-	-	-	-	-	-	-	-	-	-
Framingham,	12,948	-	-	-	-	-	-	-	-	-	-	-
Weymouth,	12,895	-	-	-	-	-	-	-	-	-	-	-
Watertown,	12,875	-	-	-	-	-	-	-	-	-	-	-
Southbridge,	12,592	-	-	-	-	-	-	-	-	-	-	-
Plymouth,	12,141	-	-	-	-	-	-	-	-	-	-	-
Webster,	11,509	-	-	-	-	-	-	-	-	-	-	-
Methuen,	11,448	-	-	-	-	-	-	-	-	-	-	-
Wakefield,	11,404	-	-	-	-	-	-	-	-	-	-	-
Arlington,	11,187	-	-	-	-	-	-	-	-	-	-	-
Greenfield,	10,427	-	-	-	-	-	-	-	-	-	-	-
Winthrop,	10,132	-	-	-	-	-	-	-	-	-	1	-
Total of reporting cities and towns of more than 10,000 population,	1,959,462	1	1	14	1	7	-	1	69	12	4	3
Braintree,	8,066	-	-	-	-	-	-	-	1	-	-	-
Wellesley,	5,413	-	1	-	-	-	-	-	-	-	-	-
Manchester,	2,673	-	1	-	-	-	-	-	-	-	-	-
West Newbury,	1,473	-	-	-	-	-	-	-	1	-	-	-
Russell,	965	-	-	-	-	-	-	-	1	-	-	-
Total of reporting towns of less than 10,000 population,	18,590	-	2	-	-	-	-	-	3	-	-	-

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[1] One nonresident.

[2] Three nonresidents.

Week ending March 27, 1915.

CITIES AND TOWNS.	Population. Census for 1910.	Anterior Poliomyelitis.	Cerebro-spinal Meningitis.	Diphtheria.	Measles.	Scarlet Fever.	Septic Sore Throat.	Tetanus.	Tuberculosis (Pulmonary or not classified).	Tuberculosis (Other Forms).	Typhoid Fever.	Whooping Cough.
Boston,	686,092	–	1	7[1]	3	3	1[2]	–	15[1]	7	–	1
Worcester,	145,986	–	–	–	–	–	–	–	10	1	–	–
Fall River,	119,295	–	–	3	–	–	–	–	9	–	–	1
Lowell,	106,294	–	–	–	–	–	–	–	3	1	–	–
Cambridge,	104,839	–	–	3	–	–	–	–	8	2	–	–
New Bedford,	96,652	–	–	–	–	–	–	–	1	1	–	–
Lynn,	89,336	–	–	–	–	–	–	–	–	–	–	–
Springfield,	88,926	–	–	1	–	1	–	–	3	1	–	–
Lawrence,	85,892	–	–	–	–	–	–	–	–	–	–	–
Somerville,	77,236	–	–	–	–	–	–	–	2	–	–	–
Holyoke,	57,730	–	–	–	1	–	–	–	2	–	–	–
Brockton,	56,878	–	–	1	–	–	–	–	1	–	–	–
Malden,	44,404	–	–	1	–	–	–	–	–	–	1	–
Haverhill,	44,115	–	–	–	–	–	–	–	–	–	–	–
Salem,	43,697	–	–	–	–	–	–	–	–	–	–	–
Newton,	39,806	–	–	–	–	1	–	–	–	–	–	–
Fitchburg,	37,826	–	–	–	–	–	–	–	1	–	–	–
Taunton,	34,259	–	–	–	–	–	–	–	1	–	–	–
Everett,	33,484	–	–	–	–	–	–	–	1	1	–	–
Quincy,	32,642	–	–	–	–	–	–	–	–	–	–	–
Chelsea,	32,452	–	–	–	–	–	–	–	1	–	–	–
Pittsfield,	32,121	–	–	1	–	–	–	–	1	–	–	–
Waltham,	27,834	–	–	–	–	–	–	–	2	–	1	–
Brookline,	27,792	–	–	–	–	–	–	–	–	–	–	–
Chicopee,	25,401	–	–	–	–	–	–	–	4	–	–	–
Gloucester,	24,398	–	–	–	–	–	–	–	–	–	–	–
Medford,	23,150	–	–	–	–	–	–	–	1	–	–	–
North Adams,	22,019	–	–	–	–	–	–	–	–	–	–	–
Northampton,	19,431	–	–	–	–	–	–	–	–	–	–	–
Beverly,	18,650	–	–	–	–	–	–	–	–	–	–	–
Revere,	18,219	–	–	–	–	–	–	–	–	–	–	–
Leominster,	17,580	–	–	–	–	–	–	–	–	–	–	–

Attleboro,	16,215	-	-	-	-	-	-	-	-	-	-	-
Westfield,	16,044	-	-	-	-	-	-	-	-	-	-	-
Peabody,	15,721	-	-	-	-	-	-	-	-	1	-	-
Melrose,	15,715	-	-	-	-	-	-	-	-	-	-	-
Woburn,	15,308	-	-	-	-	-	-	-	-	-	-	-
Newburyport,	14,949	-	-	-	-	-	-	-	-	-	-	-
Gardner,	14,699	-	-	-	-	-	-	-	-	-	-	-
Marlborough,	14,579	-	-	-	-	-	-	-	-	-	-	-
Clinton,	13,075	-	-	1	-	-	-	-	-	1	-	-
Milford,	13,055	-	-	-	-	-	-	-	-	-	-	-
Adams,	13,026	-	-	-	-	-	-	-	-	-	-	-
Framingham,	12,948	-	-	-	-	-	-	-	-	-	-	-
Weymouth,	12,895	-	-	-	-	-	-	-	-	-	-	-
Watertown,	12,875	-	-	-	-	-	-	-	-	-	-	-
Southbridge,	12,592	-	-	-	-	-	-	-	-	-	-	-
Plymouth,	12,141	-	-	-	-	-	-	-	-	-	-	-
Webster,	11,509	-	-	-	-	-	-	-	-	-	-	-
Methuen,	11,448	-	-	-	-	-	-	-	-	-	-	-
Wakefield,	11,404	-	-	-	-	-	-	-	-	-	-	2
Arlington,	11,187	-	-	-	-	-	-	-	-	-	-	-
Greenfield,	10,427	-	-	-	-	-	-	-	-	-	-	-
Winthrop,	10,132	-	-	-	-	-	-	-	-	-	-	-
Total of reporting cities and towns of more than 10,000 population,	1,899,461	-	1	18	4	5	1	-	66	16	2	4
Danvers,	9,407	-	-	-	-	-	-	-	1	-	-	-
Montague,	6,866	-	-	-	-	-	-	-	1	-	-	-
Amherst,	5,112	-	-	-	-	-	-	-	-	-	-	1
Provincetown,	4,369	-	-	-	-	-	-	-	1	-	2	-
Somerset,	2,798	-	-	-	-	-	-	-	-	1	-	-
Groton,	2,155	-	-	1	-	-	-	-	-	-	-	-
Freetown,	1,471	-	-	-	-	1	-	-	-	-	-	-
Total of reporting towns of less than 10,000 population,	32,178	-	-	1	-	1	-	-	3	1	2	1

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[1] Two nonresidents.

[2] One nonresident.

DECISION OF THE SUPREME JUDICIAL COURT OF MASSACHUSETTS CONCERNING METHOD OF ASCERTAINING POPULATION OF CITY OR TOWN FOR THE ISSUANCE OF SLAUGHTERING LICENSES.

McLaughlin *v.* Bunzel.

Suffolk. April 16, 1915.

Slaughtering License — Method of ascertaining Population of City or Town — Census, State or National to control — Cannot be proved as an Ordinary Fact.

Bill in equity by the Health Commissioner of the Commonwealth to enjoin defendant from carrying on the business of slaughtering neat cattle, sheep and swine in the town of Lexington. The defendant had received a license from the board of health of the town, but it was contended that the town had a population of less than five thousand and that such license should have been issued, if at all, by the board of selectmen. In the Supreme Judicial Court, Pierce, J., reported the case to the full court.

H. C. Attwill, Attorney-General, and J. W. Corcoran, Assistant Attorney-General for Commonwealth.

Sawyer, Hardy, Stone & Morrison, E. C. Stone, for respondent.

Rugg, C.J. It is provided by R. L., c. 75, § 100, as amended by St. 1911, c. 297, § 2, that "The mayor and aldermen, selectmen, or such other officers as they shall designate, or in a town having a population of more than five thousand, the board of health, if any, may annually issue licenses to carry on the business of slaughtering neat cattle, sheep or swine." The respondent has carried on such business under the supposed protection of a license issued by the board of health of Lexington. The jurisdiction of that board is challenged on the ground that Lexington, according to the last official census taken, had a population of less than five thousand. The respondent offered to show by a count made by the assistant postmaster of Lexington that the population of the town was more than five thousand in 1914. The crucial point is whether the census is the sole test for determining population for the purposes of this statute, or whether population can be proved as any ordinary fact in a proceeding in court.

The statute is silent as to the method of determining population under these circumstances. A decennial census is taken by the Commonwealth in those years divisible by five and not by ten, and by the United States in those years divisible by ten, so that there is an official census every five years. There is no machinery for an authoritative count at any other times. Formerly it was provided by R. L., c. 107,

§ 3, that a special enumeration of the inhabitants of cities and towns should be made by the Chief of the Bureau of Statistics of Labor at any time at the request of the mayor and aldermen of a city and of the selectmen of a town. But that was repealed by St. 1908, c. 90. That is a strong indication of a legislative purpose to depend wholly upon the official figures of the latest census. It is important that there should be a certain and easily accessible method of determining where the power to appoint rests in cases like the present. There can be no such method unless an official census is resorted to. There well may be several towns where the population is near to five thousand. If the census is not the standard, then in case of dispute between the selectmen and the board of health, or of real doubt as to which board was vested with jurisdiction to act, there would be no way of settling the fact decisively so as to bind everybody. The law makes no provision for a count at the expense of the town. No appropriation could be made from the town treasury for such purpose. It cannot be presumed that the Legislature intended that a matter touching the public health so nearly as the preparation of a generally used food should be liable to be thrown into litigation in large communities in successive years. Any other means of determining population than by resort to authentic public records would open the door to great uncertainty and to the possibility or likelihood of mistake based on undue zeal, incompetence or even deceit.

Constitutional mandates compel the periodical taking of the census. Large sums of public moneys are spent to this end. The population statistics revealed by it bear the stamp of official regularity and accuracy. It is the almost universal source of reliable information as to numbers of inhabitants. A census is taken at such frequent intervals that no hardship can result from reliance upon it.

The inference is irresistible that in this matter the General Court intended that the population shown by the last State or national census must be used to determine which board has jurisdiction. Arguments as to statutory interpretation which have been urged with force by the defendant, and which might be of weight in close cases, are of slight moment in face of the overwhelming practical considerations to the contrary. Decisions upon somewhat kindred facts are to this effect. See *In re* Sewer Assessment for Passaic, 54 N. J. L. 156; Adams *v.* Elwood, 176 N. Y. 106. No question is presented as to the census of summer residents under R. L., c. 100, § 13.

It follows that the board of health of Lexington had no jurisdiction in the premises, and that the defendant ought to have made application to the selectmen. Injunction is to issue restraining the defendant from acting under the license issued by the board of health.

DEPORTATION OF CERTAIN ALIENS WITHIN THREE YEARS.

It is not generally known that aliens who are suffering from a dangerous contagious disease, insane persons and others who have become a public charge may be deported to Europe at any time within three years after landing, provided their condition is due to causes prior to landing. Lack of knowledge of this fact results in some communities assuming financial burdens which are entirely needless.

Dr. Allan J. McLaughlin, the Commissioner of Health, has issued a circular letter to district health officers calling their attention to the immigration law and directing them to advise local officials in their districts to avail themselves thereof.

Aliens suffering from tuberculosis are not admitted into the United States, but many aliens certified as having poor physique, flat chest, underweight for age, anæmia, and other rather indefinite defects are admitted. These aliens are excellent material for tuberculosis if they are exposed to slum conditions.

Some time ago Dr. McLaughlin requested the Commissioner General of Immigration to furnish lists of aliens, destined for Massachusetts cities and towns, having the defects mentioned above. On April 8 Mr. J. B. Densmore, Acting Secretary of the Department of Labor, came from Washington and conferred with Dr. McLaughlin relative to this matter. He agreed to co-operate with the State Department of Health in so far as his appropriation will permit. When these lists are received the Commissioner of Health will then notify the local boards of health, and the tuberculosis dispensary will be able either to prevent the development of tuberculosis, or to arrange for deportation of the alien at the earliest possible moment if the disease should develop.

AN OUTBREAK OF TYPHOID FEVER AMONG RAILROAD EMPLOYEES OF THE FITCHBURG DIVISION, BOSTON & MAINE RAILROAD, IN 1914-15.

Seventeen cases of typhoid fever occurred among railroad employees running out of the East Deerfield yards of the Fitchburg division during the winter of 1914–15, specifically between Oct. 6. 1914, and Feb. 11, 1915. Ten of these cases were reported from Greenfield, 4 of them being secondary cases; 2 cases were fatal, 1 reported from Williamstown and 1 from Greenfield.

In the investigation of these cases it developed that the only common factor in the lives of these patients was the use of the water at the East Deerfield terminal shops, roundhouse and Y. M. C. A. building for drinking or for washing, or for both. There was no source of milk or food supply common to all, no person who came into contact with them all who might for this reason be suspected of being a carrier.

The East Deerfield terminal is located about three miles from the center of Greenfield. There is maintained there a small repair shop, employing about 40 men, a large roundhouse and a railroad Y. M. C. A. building which is visited by from 100 to 400 men daily for recreation, bathing, eating or sleeping. The drinking water at the Y. M. C. A. building is piped in from a spring on the hillside and passed through a filter before use. The water used for washing (face and hands), bathing and dishwashing at the Y. M. C. A. is taken from the tanks used to supply the engines with water. The water ordinarily used for all purposes in the shop and roundhouse is gathered in a small reservoir from an apparently safe watershed. If this supply should give out at any time, it is arranged, by means of a Y joint and valves, that the tank water can be turned into the pipes and used for all purposes in the shops and roundhouse. The tank water is pumped from the Deerfield River at a point about three-fourths of a mile below the junction of the Green and Deerfield rivers. The main sewer of the town of Greenfield discharges into the Green River about one-fourth of a mile above its junction with the Deerfield, so that the tank water is obtained about one mile below this sewer outlet.

During the latter part of the summer of 1914 the water in the Deerfield River was very low, and almost all that was running was impounded in the dams of the New England Power Company. The water supply of Greenfield in the Leyden Reservoir was reduced to a low level and was augmented by pumping from the Green River all that was obtainable. As a result, nearly all the water that got to the pumping station at East Deerfield was the water that had come through the Greenfield sewers. During all this period of low water, the small reservoir at East Deerfield was practically empty, and the tank water was turned in and used for all purposes, except for the actual drinking supply at the Y. M. C. A. building, and even this supply was so meager that it ran slowly and inadequately. There were a number of small, unprotected springs on the hillside opposite the shops, and to these the men went in great part for their drinking water, as they did not like the taste of the tank water. An analysis of the water from these springs showed an over supply of organic matter, probably from surface pollution, but did not show a dangerous condition. The men used, in part for drinking and entirely for washing and bathing, this tank water, which was practically unfiltered Greenfield sewage.

During the year 1914, in addition to these 17 cases, 6 cases were reported in Greenfield and 1 in Deerfield. Two of the Greenfield cases had a period of two weeks during which their stools were thrown into the sewer without disinfection. During the rest of their sickness and during the whole of the sickness of two of the other cases the stools were disinfected by shaking chloride of lime over them, without mixing it with the stools, and letting them stand, supposedly for two hours, but admittedly sometimes for a shorter period, before throwing them into the sewer. The discharges from one case were disinfected by mixing them with $\frac{1}{5000}$ solution of bichloride of mercury, and letting them stand for two hours. One case had no connection with the Greenfield sewers.

It would seem, then, that this outbreak of 17 cases, 2 of them fatal, was due primarily to the pollution of sewage by discharges from typhoid fever cases. Two of the polluting cases were unrecognized for two weeks each, and no disinfection of stools was done during that period. Because of the methods employed it is probable that none of the discharges from these cited cases were efficiently disinfected.

This outbreak is a demonstration of the responsibility of doctors and nurses in charge of those sick with communicable diseases for the destruction of the infective material at its source.

NEW LEGISLATION.

General Acts.

Chapter 104.

An Act relative to the reports of analyses made by the state department of health, of drugs and poisons.

Be it enacted, etc., as follows:

Chapter four hundred and ninety-five of the acts of the year nineteen hundred and ten is hereby amended by striking out section two and inserting in place thereof the following: — *Section 2.* The analyst, or an assistant analyst, of the state department of health shall, upon request, furnish a signed certificate under oath of the result of the analysis provided for in section one to any police officer or any agent of an incorporated charitable organization, and the presentation of such certificate to the court by any police officer or agent of any such organization shall be prima facie evidence that all the requirements and provisions of section one have been duly complied with. This certificate shall be sworn to before a justice of the peace or notary public, and the jurat shall contain an allegation that the subscriber is the analyst or an assistant analyst of the state department of health, and when properly executed shall be prima facie evidence of the composition and quality of the drugs analyzed, and the court shall take judicial notice of the signature of the analyst or assistant analyst, and of the fact that he is such.

SECTION 2. This act shall take effect upon its passage. [*Approved March 25, 1915.*

CHAPTER 143.

AN ACT RELATIVE TO THE MAINTENANCE OF HOSPITALS BY CITIES AND TOWNS.

Be it enacted, etc., as follows:

Section twenty-five of chapter eighty-one of the Revised Laws is hereby amended by inserting after the word "may", in the first line, the words: — purchase or take land, and, — and by inserting after the word "maintain", in the same line, the word: — thereon, — and by striking out the words "by misfortune or poverty", in the second line, — so as to read as follows: — *Section 25.* A city or town may purchase or take land, and erect, establish and maintain thereon a hospital for the reception of persons who require relief during temporary sickness. City councils and selectmen may make such ordinances, rules and regulations as they may consider expedient for the appointment of trustees and all other officers and agents necessary for managing such hospital. [*Approved April 6, 1915.*

CHAPTER 148.

AN ACT RELATIVE TO THE MANUFACTURE AND SALE OF MATTRESSES AND CERTAIN OTHER ARTICLES.

Be it enacted, etc., as follows:

SECTION 1. No person shall manufacture for purposes of sale, sell, offer or expose for sale, or have in possession with intent to sell, any mattress, pillow, cushion, muff bed, quilt or similar article having a filling of hair, down, feathers, wool, cotton, silk floss or other material, unless there shall be plainly marked upon each such article, or upon a tag of some durable substance sewed thereon, or otherwise securely attached thereto, a statement of the kind of material used for filling in the manufacture of such article, and, also, if the material has previously been used, the word "secondhand". If any such article or articles are enclosed in a bale, box, crate, or other receptacle, there shall be plainly marked upon such receptacle, or upon a durable tag securely attached thereto, a statement that the contents of the package are marked as required by this act. It shall be unlawful for any person except a purchaser at retail to remove or efface any marking upon any article or receptacle, or any tag attached thereto, under the provisions of this act.

SECTION 2. No person shall use, in the manufacture of any mattress, pillow, cushion, muff bed, quilt, or similar article for purposes of sale, or shall sell or offer or expose for sale, or have in possession for the purpose of such use or for sale, any material which has previously been used in or about a hospital, or on or about the person of any one having an infectious or contagious disease, nor shall any person sell, or offer or expose for sale, any such articles containing materials which have previously been so used.

SECTION 3. It shall be the duty of the state department of health, whenever there is reason to believe that any provision of this act is being violated, to cause an investigation to be made of any factory, shop, warehouse, store, or other place where it is believed that the act is being violated, and for this purpose any member of the said department, or any duly accredited representative thereof, shall have authority to enter any building or other place at all reasonable times. If, upon investigation, mattresses, pillows, cushions, muff beds, quilts or similar articles, or materials for use in the manufacture of the same, shall be found, which have been previously used in or about a hospital, or on or about the person of any one having an infectious or contagious disease, such materials or articles, manufactured or in process of manufacture, shall be marked by the state department of health with labels bearing the word "unclean" in conspicuous letters, and the state department of health, with or without notice to the owner or supposed owner, may order the removal and destruction of the said materials or articles, or may make such other order relating to the said materials or articles as the circumstances of the case may require.

SECTION 4. The state department of health, or its duly authorized representative, whenever, in the opinion of the department, it is necessary to safeguard the public health, may post upon any building or part thereof containing such materials or articles, or from which the same have been removed, notice or warning of the danger of contagion or infection resulting from the violation of the provisions of this act, and may continue such notice upon the said premises until the same shall have been properly cleaned and disinfected. It shall be unlawful for any person to remove such notice or warning except by order of the state department of health.

SECTION 5. It shall be the duty of any police officer or member of any municipal board of health, or other city or town official, who has reason to believe that the provisions of this act have been or are being violated, to give notice thereof to the state department of health.

SECTION 6. Whoever manufactures for purposes of sale, sells, offers or exposes for sale, or has in possession with intent to sell, any mattress, pillow, cushion, muff bed, quilt, or similar article having a filling of hair, down, feathers, wool, cotton, silk floss or other material, which is not marked in accordance with the provisions of this act, or whoever uses in the manufacture of any of the said articles materials previously used in or about a hospital, or upon or about the person of any one having an infectious or contagious disease, shall be punished by a fine not exceeding five hundred dollars, or by imprisonment not exceeding six months, or by both such fine and imprisonment. Whoever removes or effaces any marking upon any article or receptacle or any tag attached thereto, or any notice or warning posted upon any premises by the state department of health under the provisions of this act, shall be punished by a fine not exceeding fifty dollars for each offence. [*Approved April 8, 1915.*

CHAPTER 158.

AN ACT RELATIVE TO THE MARKING OF RECEPTACLES CONTAINING VINEGAR.

Be it enacted, etc., as follows:

Section three of chapter six hundred of the acts of the year nineteen hundred and eleven is hereby amended by striking out the words "and the substance or substances from which it was made", in the sixth and seventh lines, and inserting in place thereof the words: — the substance or substances from which the vinegar is made, and cider vinegar, if diluted with water, shall be distinctly and conspicuously labelled to indicate this fact, as for example, "Diluted to Legal Strength", — so as to read as follows: — *Section 3.* Each cask, barrel or other container used by a manufacturer or producer of or wholesale dealer in vinegar, to contain vinegar sold or offered for sale, shall be plainly marked with the name and place of business of the said manufacturer, producer or wholesale dealer, the kind of vinegar contained therein, the substance or substances from which the vinegar is made, and cider vinegar, if diluted with water, shall be distinctly and conspicuously labelled to indicate this fact, as for example, "Diluted to Legal Strength." Every compound or mixture or blend of vinegar shall be marked with the word "compound" or "mixture", with a statement of its constituents and the percentage of each constituent. The principal label, including the word "compound" or "mixture", if used on vinegar in wooden packages, shall be in Roman letters not less than one inch high, properly spaced and in straight parallel lines with no more than two inches of space between each line. The marking of vinegar in other containers than wooden packages shall be governed by the provisions of sections eighteen and nineteen of chapter seventy-five of the Revised Laws. Whoever, himself, or by his servant or agent, violates any provision of this section shall be punished by a fine of not more than one hundred dollars. [*Approved April 12, 1915.*

CHAPTER 159.

AN ACT RELATIVE TO SEARCH WARRANTS UNDER THE LAW RELATING TO CERTAIN DRUGS.

Be it enacted, etc., as follows:

SECTION 1. Section one of chapter three hundred and seventy-two of the acts of the year nineteen hundred and eleven, as amended by section one of chapter two hundred and eighty-three of the acts of the year nineteen hundred and twelve, is hereby further amended by inserting after the word "substances", in the seventh line, the words: — or cocaine, alpha or beta eucaine, or any synthetic substitute for them, or any preparation containing the same, or any salts or compounds thereof, — by inserting after the word "return", in the twenty-seventh line, the word: — forthwith, — and by striking out the words "as soon as may be," in the twenty-seventh and twenty-eighth lines, — so as to read as follows: — *Section 1.* If a person makes complaint under oath to a police, district, or municipal court, or to a trial justice or justice of the peace authorized to issue warrants in criminal cases, that he has reason to believe that opium, morphine, heroin, codeine, cannabis indica, cannabis sativa or any other hypnotic drug or any salt, compound or preparation of said substances, or cocaine, alpha or beta eucaine, or any synthetic substitute for them, or any preparation containing the same, or any salts or compounds thereof, is kept or deposited by a person named therein in a store, shop, warehouse, building, vehicle, steamboat, vessel or place other than by a manufacturer or jobber, wholesale druggist, registered pharmacist, registered physician, registered veterinarian, registered dentist, registered nurse, employees of incorporated hospitals, or a common carrier or porter when transporting any drug mentioned herein between parties hereinbefore mentioned, such court or justice, if it appears that there is probable cause to believe that said complaint is true, shall issue a search warrant to a sheriff, deputy sheriff, city marshal, chief of police, deputy marshal, police officer or constable commanding him to search the premises in which it is alleged that such opium, morphine, heroin, codeine, cannabis indica, cannabis sativa or any other hypnotic drug or any salt or compound or preparation of said substances or any preparation containing the same is kept or deposited, and to seize and securely keep the same until final action, and to arrest the person or persons in whose possession it is found, together with all persons present if any of the aforesaid substances is found, and to return forthwith the warrant with his doings thereon, to a court or trial justice having jurisdiction in the place in which such substance is alleged to be kept or deposited.

SECTION 2. This act shall take effect upon its passage. [*Approved April 12, 1915.*

CHAPTER 187.

AN ACT RELATIVE TO THE SALE AND DISTRIBUTION OF NARCOTIC DRUGS.

Be it enacted, etc., as follows:

SECTION 1. It shall be unlawful for any person, firm or corporation to sell, furnish, give away or deliver coca leaves or any cocaine or any alpha or beta eucaine or any synthetic substitute for them, or any salts, compound or derivative thereof, except decocainized coca leaves and preparations thereof, or any opium, morphine, heroin, codeine or any preparation thereof, or any salt, compound or derivative of the same, except upon the written order of a manufacturer or jobber in drugs, wholesale druggist, registered pharmacist actively engaged in business as such, physician, dentist, veterinarian, registered under the laws of the state in which he resides, or an incorporated hospital, college or scientific institution through its superintendent or official in immediate charge, or upon the written prescription of a physician, dentist or veterinarian, registered under the laws of the state in which he resides, bearing the date when signed, his office address, the registry number given him under public acts two hundred and twenty-three of the sixty-third congress, approved December seventeenth, nineteen hundred and fourteen, the legal signature of the physician, dentist or veterinarian giving it, the name and address of the patient for whom prescribed, which prescription, when filled, shall show the date of filling and shall be retained on file by the druggist filling it for a period of at least two years. The prescription shall not again be filled, nor shall a copy of the same be made, except for the purpose of record by the druggist filling the same, and it shall at all times be open to inspection by the officers of the state department of health, the board of registration in pharmacy, the board of registration in medicine and the authorized agents of said department and boards, and by the police authorities and police officers of cities and towns: *provided, however*, that the provisions of this act shall not apply to prescriptions nor to the sale, distribution, giving away or dispensing or possession of preparations or remedies, if such prescriptions, preparations and remedies do not contain more than two grains of opium or more than one quarter of a grain of morphine, or more than one eighth of a grain of heroin or more than one grain of codeine, or any salt, compound or derivative of any of them in one fluid ounce, or, if a solid or semi-solid preparation, in the avoirdupois ounce; nor to liniments, ointments or other preparations which are prepared for external use only, except liniments, ointments and other preparations which contain cocaine or any of its salts or alpha or beta eucaine or any of their salts or derivatives, or any synthetic substitute for them: *provided*, that such preparations, remedies or prescriptions are sold, distributed, given away or dispensed or in possession in good faith as medicines and not for the purpose of evading the provisions of this act; and *provided, further*, that the possession of any of the drugs mentioned in this act, except prescriptions and preparations or remedies especially exempted in this section, by any one not being a manufacturer or jobber of drugs, or wholesale druggist, registered pharmacist actively engaged in business as such, or a physician, dentist or veterinarian, registered under the laws of the state in which he resides, or superintendent or official in charge of an incorporated hospital, college or scientific institution shall be presumptive evidence that such possession was a violation of this act. The provisions of this section shall not apply to persons having in their possession any of the above mentioned articles by virtue of a legal prescription therefor, nor shall the provisions of this act apply to decocainized coca leaves or preparations made therefrom or to other preparations of coca leaves which do not contain cocaine.

SECTION 2. It shall be unlawful for any practitioner of veterinary medicine or surgery to prescribe any of the drugs mentioned in section one of this act for the use of a human being, and it shall be unlawful for any physician or dentist to prescribe, sell, give away or deliver any coca leaves or any cocaine or any alpha or beta eucaine or any compound, derivative or synthetic substitute for them, or opium, morphine, heroin, codeine or any preparation thereof, or any salt, compound or derivative of said substances to any person known to such physician or dentist to be an habitual user of those drugs, except when the drug is obviously needed for therapeutic purposes.

SECTION 3. The provisions of this act shall not be construed to prevent any lawfully authorized practitioner of medicine, dentistry, or veterinary medicine from prescribing, administering, dispensing or distributing any of the drugs mentioned in this act that may be indicated for any patient under his care: *provided*, that such prescribing, administering, dispensing, or distributing is not for the purpose of evading the provisions of this act; and *provided, further*, that every physician, dentist or veterinarian shall, within twenty-four hours after such administering, dispensing or distributing, make a record in a book kept by him solely for that purpose of the date, the name and address of the patient to whom administered, dispensed or distributed, and the quantity and kind of such drug administered, dispensed or distributed, and *provided, further*, that such record shall not be required where the physician, dentist or veterinarian administers, dispenses or distributes any of the drugs mentioned in this act to a patient on whom he personally attends. Each page of the book shall be ruled and kept in substantially the following form: —

Name of Physician or Dentist (sign in full on each page).

Date.	NAME OF PERSON TO WHOM DISPENSED.	Address.	Drugs dispensed.	Amount dispensed.

Provided, however, that any form of record approved or required by the commissioner of internal revenue under and by virtue of public acts two hundred and twenty-three of the sixty-third congress, approved December seventeenth, nineteen hundred and fourteen, shall be deemed a sufficient record to comply with the requirements of this act. This record shall be at all times open to inspection by the state department of health, the board of registration in pharmacy, the board of registration in medicine and the authorized agents of said department and boards, and by the police authorities and police officers of cities and towns.

SECTION 4. Any manufacturer or jobber of drugs, and any wholesale druggist and any registered pharmacist actively engaged in business as such, any physician, dentist or veterinarian registered under the laws of the state in which he resides may sell coca leaves, cocaine or any alpha or beta eucaine or any synthetic substitute for them or any preparation containing the same, or any salts, compound or derivative thereof, or any opium, morphine, codeine, heroin or any preparation thereof, or any salt or compound or derivative of such substances, to any manufacturer or jobber in drugs, wholesale druggist, registered pharmacist actively engaged in business as such, or physician, dentist or veterinarian registered under the laws of the state in which he resides, or to any incorporated hospital, college or scientific institution, but such substances or preparations, excepting such preparations as are included within the exemptions set forth in section one, shall be sold only upon the written order of an incorporated hospital, college or scientific institution, duly signed by its superintendent or official in immediate charge, or upon a written order duly signed by such manufacturer or jobber in drugs, wholesale druggist, registered pharmacist actively engaged in business as such, or physician, dentist or veterinarian registered under the laws of the state in which he resides, which order shall state the article or articles ordered, the quantity ordered and the date. The said orders shall be kept on file in the laboratory, warehouse, pharmacy or store in which they are filled by the proprietor thereof or his successors for a period of not less than two years after the date of delivery, and shall be at all times open to inspection by the state department of health, the board of registration in pharmacy, the board of registration in medicine and the authorized agents of said department and boards, and by the police authorities and police officers of cities and towns.

SECTION 5. Any manufacturer or jobber in drugs and any wholesale druggist and any registered pharmacist actively engaged in business as such, physician, dentist or veterinarian registered under the laws of the state in which he resides, and any incorporated hospital, college or scientific institution through its superintendent or official in immediate charge that shall give an order for any of the aforesaid drugs in accordance herewith shall preserve a duplicate thereof for a period of two years after the date of giving the same, which shall at all times be open to inspection by the state department of health, members of the board of registration in pharmacy, the board of registration in medicine and the authorized agents of said department and boards, and by the police authorities and police officers of cities and towns. The order now or hereafter required by the regulations of the commissioner of internal revenue under and by virtue of public acts number two hundred and twenty-three of the sixty-third congress, approved December seventeenth, nineteen hundred and fourteen, shall be deemed to be a sufficient order to comply with this and the preceding section.

SECTION 6. Any person who, for the purpose of evading or assisting in the evasion of any provision of this act shall falsely represent that he is a physician, dentist or veterinarian, or that he is a manufacturer or jobber in drugs or wholesale druggist or pharmacist actively engaged in business as such, or that he is superintendent or official in immediate charge of an incorporated hospital, college or scientific institution, or a person registered under public act two hundred and twenty-three of the sixty-third congress, approved December seventeenth, nineteen hundred and fourteen, or who, not being an authorized physician, dentist or veterinarian, makes or alters a prescription for any of the substances above mentioned shall be deemed guilty of a violation of this act.

SECTION 7. The possession of a federal certificate issued under and by virtue of public act number two hundred and twenty-three of the sixty-third congress, approved December seventeenth, nineteen hundred and fourteen, by any person shall be prima facie evidence of an intent to sell, furnish, give away or deliver any of the drugs enumerated in this act.

SECTION 8. Nothing in this act shall apply to common carriers engaged in transporting the aforesaid drugs or to any employee, acting within the scope of his employment, of any person who shall lawfully be in possession, for the purpose of delivery, of any of the drugs mentioned in this act, or to any person who shall deliver any such drug which has been prescribed or dispensed by a physician, dentist or veterinarian registered under the laws of the state in which he resides who has been employed to prescribe for the particular patient receiving such drug, or to a nurse under the supervision of a physician, dentist or veterinarian having possession or control by virtue of his employment or occupation and not on his own account, or to the possession of any of the aforesaid drugs which have been prescribed in good faith by a physician, dentist or veterinarian, or to any United States, state, county, municipal, district, territorial or insular officer or official who has possession of any of said drugs by reason of his official duties, or who, as an officer or duly appointed agent of any incorporated society for the suppression of vice, has the same in his possession for the purpose of assisting in the prosecution of violations of this act.

Section 9. The provisions of this act, except those sections which require the ordering of the above enumerated drugs on an official order blank and the keeping of the same on file, and the keeping of the record relative thereto, shall apply to cannabis indica and cannabis sativa, except that the same shall not apply to prescriptions, preparations or remedies which do not contain more than one half grain of extract of cannabis indica or more than one half grain of extract of cannabis sativa in one fluid ounce, or if a solid or semi-solid preparation in the avoirdupois ounce, nor to liniments, ointments or other preparations containing cannabis indica and cannabis sativa, which are prepared for external use only.

Section 10. The repeal of any law by this act shall not affect any action, suit or prosecution pending at the time of the repeal for an offense committed, or for the recovery of a penalty, or forfeiture incurred, under any of the laws repealed.

Section 11. Whoever violates any provision of this act shall be deemed guilty of a misdemeanor and shall be punished by a fine of not more than one thousand dollars, or by imprisonment in the house of correction or jail for a term not exceeding one year, or by both such fine and imprisonment.

Section 12. Chapters six hundred and ninety-four and seven hundred and eighty-eight of the acts of the year nineteen hundred and fourteen, and sections two to six, inclusive, of chapter three hundred and eighty-seven of the acts of the year nineteen hundred and ten, are hereby repealed. [*Approved April 20, 1915.*

MASSACHUSETTS STATE DEPARTMENT OF HEALTH.

Commissioner, Allan J. McLaughlin, M.D.

Division of Sanitary Engineering, . . .	Director, X. H. Goodnough, C.E.
Division of Communicable Diseases, . . .	Director, E. R. Kelley, M.D.
Division of Water and Sewage Laboratories, .	Director, H. W. Clark.
Division of Antitoxin and Vaccine Laboratories,	Director and Pathologist, Milton J. Rosenau, M.D.
Division of Food and Drugs, ...	Director, H. C. Lythgoe, S.B.
Division of Records and Accounts, . . .	Director, Wm. C. Hanson, M.D.

Public Health Council:

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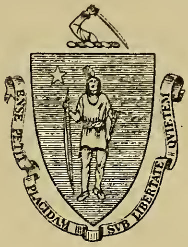
PUBLIC HEALTH BULLETIN

ISSUED MONTHLY

BY THE

STATE DEPARTMENT OF HEALTH

OF MASSACHUSETTS



APRIL, 1915

Vol. 2, No. 4

Entered as Second-class Matter Oct. 26, 1914, at the Post Office at Boston, Mass.,
under the Act of Aug. 24, 1912

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Approved by
The State Board of Publication.

PUBLIC HEALTH BULLETIN.

REPORT UPON THE WORK OF THE BACTERIOLOGICAL LABORATORY FOR THE MONTH OF APRIL, 1915.

The following gives the total number of biological products and diagnostic outfits distributed by the bacteriological laboratory of the State Department of Health during the month of April, 1915: —

Biological Products.

Diphtheria antitoxin: —	
4,000 units (special for the Boston City Hospital),	1,372 bottles.
3,000 units,	3,145 bottles.
1,500 units,	757 bottles.
750 units,	716 bottles.
Smallpox vaccine,	4,447 tubes.
Typhoid vaccine,	3,692 ampoules.
Antimeningitis serum,	124 bottles.
Silver nitrate solution,	161 droppers.

Diagnostic Outfits.

Culture tubes,	1,059
Sputum bottles,	399
Widal outfits,	90
Bile outfits,	22
Malaria outfits,	6

The following gives the total number of bacteriological examinations made in the laboratory of the State Department of Health during the month of April, 1915: —

	Number of Examinations.	Diagnosis.		Release.	
		Positive.	Negative.	Positive.	Negative.
Diphtheria,	829	71	566	62	130

	Number of Examinations.	Positive.	Negative.	*Atypical.
Tuberculosis,	321	59	262	
*Typhoid fever (Widal test),	108	11	91	6
Typhoid fever (culture test),	15	–	15	
*Paratyphoid fever,	3	1	2	–
Malaria,	3	–	3	
Miscellaneous,	82			

Total number of examinations made, 1,361.

FOOD AND DRUGS.

The following tables present the results of the laboratory examinations of samples of food and drugs collected during the month of April, 1915: —

The cities and towns in which samples were collected were: Abington, Acton, Agawam, Andover, Attleboro, Bedford, Beverly, Blackstone, Boston, Brookline, Chelmsford, Chelsea, Concord, Danvers, Dedham, Essex, Everett, Foxborough, Framingham, Gloucester, Hingham, Ipswich, Lawrence, Lowell, Lynn, Malden, Marblehead, Medford, Milford, Milton, Newbury, North Adams, Norwood, Peabody, Pittsfield, Quincy, Reading, Revere, Richmond, Rockport, Rowley, Salem, Saugus, Somerville, Springfield, Swampscott, Uxbridge, Wakefield, Watertown, Westfield and Woburn.

SUMMARY OF ANALYSES.

ARTICLES EXAMINED.	Number found to be of Good Quality.	Number adulterated or varying from the Legal Standard.	Total.
Butter,	–	1	1
Canned goods,	2	–	2
Confectionery,	1	–	1
Cream,	14	–	14
Drugs,	99	6	105
Flavoring extract: —			
Vanilla,	8	6	14
Ice cream,	2	–	2
Jams and jellies,	2	2	4
Lard,	4	1	5
Maple sugar,	48	8	56
Maple syrup,	3	2	5
Meat products: —			
Hamburg steak,	1	–	1
Pork trimmings,[1]	–	11	11
Sausage,	3	2	5
Milk,	493	223	716
Olive oil,	–	1	1
Scallops,	1	–	1
Spices,	6	–	6
Totals,	687	263	950

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[1] Taken from cold storage.

PROSECUTIONS FOR VIOLATIONS OF THE LAWS RELATING TO FOOD AND DRUGS.

Thirty-seven convictions were secured during the month of April, 1915, for the sale of adulterated food, and for violation of the cold-storage and slaughtering laws, as follows: —

NAME OF DEFENDANT.	Place.	Character of Article sold or Nature of Offence.
George Blume,	West Acton,	Milk (total solids, 9.42).[1, 2]
Joseph Golart,	Gloucester,	Milk (total solids, 11.52).
Edward F. Manley,	North Abington,	Milk (total solids, 10.86).[3]
Thomas McGrath,	North Abington,	Milk (total solids, 11.78).[3]
Charles Merry,	Gloucester,	Milk (total solids, 10.64).[1]
Frank S. Perry,	Attleboro,	Milk (total solids, 12.80).[2]
Manuel Simmons,	Gloucester,	Milk (total solids, 11.18).
Jacob Smith,	Hull,	Milk (total solids, 9.50).[2]
George C. Trevoy,	Gloucester,	Milk (total solids, 10.60).
Joseph E. Williams,	Gloucester,	Milk (total solids, 11.64).
Mikel Amorelli,	Lawrence,	Lard (compound; not marked).
Ameen Bistang,	Lawrence,	Lard (compound; not marked).
John Cutsulianos,	Lawrence,	Lard (compound; not marked).
Kostantia Klonda,	Lawrence,	Lard (compound; not marked).
Noum A. Nayazbek,	Lawrence,	Lard (compound; not marked).
Maria A. Silva,	Lawrence,	Lard (compound; not marked).
Mikel Amorelli,	Lawrence,	Olive oil (40 per cent. cottonseed oil).
John Dailia,	Peabody,	Olive oil (100 per cent. cottonseed oil).
Hubert Close,	Pittsfield,	Sausage (2.65 per cent. starch).
John Eberwein,	Pittsfield,	Sausage (2.65 per cent. starch).
H. A. Rich Co.,	Boston,	Shrimp (compound of boron).
Victor Brunell,	Ludlow,	Cold storage sign not displayed.
Daniel M. Foley,	Holyoke,	Cold storage sign not displayed.
Benjamin Green,	South Boston,	Cold storage sign not displayed.
Ludwig Hadro,	Ludlow,	Cold storage sign not displayed.
Louis Klein,	South Boston,	Cold storage sign not displayed.
Daniel Long,	Holyoke,	Cold storage sign not displayed.
Eva Pattow,	South Boston,	Cold storage sign not displayed.
Joas Santos,	Ludlow,	Cold storage sign not displayed.
Eugene Stapleton,	South Boston,	Cold storage sign not displayed.
Michael Sualich,	South Boston,	Cold storage sign not displayed.
Max Suher,	Holyoke,	Cold storage sign not displayed.
John Viger,	Holyoke,	Cold storage sign not displayed.
Robert Wolfenden,	Holyoke,	Cold storage sign not displayed.
Walter Ziemba,	Chicopee,	Cold storage sign not displayed.
Jacob Belander,	Gloucester,	Slaughtering without a license.
Max Katz,	North Adams,	Slaughtering without inspector present.

[1] Appealed. [2] Watered. [3] Skimmed.

Fines imposed, $368.

Quarterly Report on the Business of Slaughtering and Meat Inspection, Jan. 1, 1915, to April 1, 1915.

During the interval between Jan. 1 and April 1, 1915, 44,406 carcasses were inspected. Of this number, 43,894 passed inspection and 512 were condemned. Of this number, 205 were calves, 164 cattle, 143 hogs. Of the 164 cattle condemned, 149 were found to have tuberculosis. Of the 205 calves condemned, 198 were immature. Of the 143 hogs condemned, 56 were afflicted with hog cholera, 10 with pneumonia and 11 with measles. Other reasons for condemnation included varied pathological conditions of the carcasses, the total number of reasons for condemnation being 30.

Of the 512 carcasses condemned, 405 were disposed of by rendering, 78 by burying, 3 by burning and 26 by being fed to hogs, dogs and poultry.

During the month of April, 1915, the following confiscations were made: —

Date.	Articles.	Weight (Pounds).	Reasons.	Disposition.
April 6, 1915	Veal, . .	110	Immature, . . .	Rendered.
April 6, 1915	Veal, . .	133	Immature, . . .	Rendered.
April 20, 1915	Veal, . .	92	Uninspected and unstamped,	Rendered.
Total, .	. . .	335		

Articles placed in Cold Storage during the Months of January, February and March, 1915.

Articles.	Cases.	Dozen.	Packages.	Pounds.
Eggs, case, ...	50,466	1,513,980	–	–
Eggs, broken, ...	–	–	940	322,420
Butter, ...	–	–	29,157	1,634,128
Poultry, ...	19	12	5,292	4,826,702½
Game, ...	–	225	523	5,875
Meat, fresh, ...	746	–	19,888	20,802,741½
Meat products, fresh (except in process of manufacture).	–	–	3,179	278,967
Fish, fresh food, . . .	5,357	–	40,346	5,754,288
Totals, ...	56,588	1,514,217	99,325	33,625,122

BUTTER AND EGGS HELD IN COLD STORAGE APRIL 1, 1915.

ARTICLES.	Cases.	Dozen.	Packages.	Pounds.
Eggs, case, ...	43,576	1,307,289	–	–
Eggs, broken, . . .	–	–	410	25,381
Butter, ...	–	–	25,110	1,315,732
Totals, ...	43,576	1,307,289	25,520	1,341,113

ARTICLES IN COLD STORAGE CONDEMNED, UPON PHYSICAL AND CHEMICAL EXAMINATIONS, AS UNFIT FOR FOOD.

Date.	ARTICLES.	Weight (Pounds).	Reasons.	Disposition.
April 7, 1915	Beef (rumps), .	75	Decomposed, . . .	Rendered.
April 10, 1915	Fowl, . .	285	Decomposed, . . .	Rendered.
April 24, 1915	Butter, . .	3,742	Sour, mouldy and fermented, . . .	Rendered.
April 24, 1915	Ox tails, . .	64	Mouldy and tainted, .	Incinerated.
April 27, 1915	Breasts of ducks, .	112	Decomposed, . . .	Rendered.
April 27, 1915	Breasts of chickens,	75	Decomposed, . . .	Rendered.
April 27, 1915	Broilers, . .	49	Mouldy and decomposed, .	Rendered.
April 27, 1915	Ox tails, . .	33	Tainted, ...	Rendered.
April 27, 1915	Guinea hens, .	5	Tainted, ...	Rendered.
April 27, 1915	Print butter, .	30	Rancid and soiled, . .	Rendered.
April 27, 1915	Turkeys, . .	382	Decomposed, . . .	Rendered.
April 27, 1915	Fowl, . .	210	Decomposed, . . .	Rendered.
April 27, 1915	Canned eggs, .	90	Decomposed, . . .	Rendered.
April 30, 1915	Beef, . . .	296	Tainted and decomposed, .	Rendered.
April 30, 1915	Chickens, . .	40	Decomposed, . . .	Rendered.
April 30, 1915	Beef, . . .	1,059	Decomposed, . . .	Rendered.
Total, .	. . . .	6,547		

SAMPLES OF FOOD WHICH UPON EXAMINATION WERE FOUND TO BE ADULTERATED.

JAMS AND JELLIES.

Contained Benzoic Acid.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
27247	Moran & Company, Boston, ...	Atwood's. Atwood Preserving Company, Cambridge.
361–T	John F. Saunders, Lowell.	

LARD.

Compound; not marked as such.

603–T	Mohican Market, Salem.	

SAMPLES OF FOOD WHICH UPON EXAMINATION WERE FOUND TO BE ADULTERATED — *Concluded.*

MAPLE SUGAR.

Contained Cane Sugar.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
433-T	J. Bolus, North Adams.	
529-T	Fish Market, 148 Salem Street, Medford.	
473-T	Fruit Store, Reading Square, Reading.	
357-T	Ellies George, North Adams.	
431-T	Thomas Kalp, North Adams.	
437-T	Joseph Lass, North Adams.	
1558-A	Henry D. Padelford, Somerville.	
483-T	Joseph Piero, Malden.	

OLIVE OIL.

Cottonseed Oil.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
595-T	N. Keljikiam, Peabody.	

SAUSAGE.

Contained Starch in Excess of 2 Per Cent.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
359-T	Charles Gaudett, Lowell, ...	I. Roussell.
363-T	John F. Saunders, Lowell.	

SYRUP MADE FROM MAPLE SUGAR AND CANE SUGAR.

Per Cent. of Ingredients not stated on Label.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
383-T	Lowell Grocery Company, Lowell, . . .	Joliet.
267-T	Tea Store, Washington Street, Roxbury, . .	Gold Brand. Atwood Preserving Company, West Somerville.

SAMPLES OF DRUGS WHICH UPON EXAMINATION WERE FOUND TO BE ADULTERATED.

SPIRIT OF ANISE.

Number of Sample.	DEALER.	Per Cent. of Required Strength.
1044-A	Walter L. Conwell, Boston, ...	59

SPIRIT OF CAMPHOR.

Number of Sample.	DEALER.	Per Cent. of Required Strength.
1622-A	J. A. McGinty, Springfield, ...	65

SAMPLES OF DRUGS WHICH UPON EXAMINATION WERE FOUND TO BE ADULTERATED — *Concluded.*

SPIRIT OF NITRE.

Number of Sample.	DEALER.	Per Cent. of Required Strength.
q 15929	W. F. Knight, Dorchester,	55

TINCTURE OF IODINE.

Number of Sample.	DEALER.	Per Cent. of Required Strength.
27229	J. L. McGowan, Brookline,	73
640–A	Penn Brothers, Lawrence,	69

SAMPLES OF MILK WHICH UPON EXAMINATION WERE FOUND TO BE ADULTERATED.

Number of Sample.	Name of Dealer, Wholesaler or Producer.	Results of Analyses.
q 15701	Ivory E. Day, Gloucester,	Total solids, 11.90 per cent.; fat, 2.80 per cent.; proteins, 3.27 per cent.; skimmed milk.
q 15705	Ivory E. Day, Gloucester,	Total solids, 12.44 per cent.; fat, 3.10 per cent.; proteins, 3.39 per cent.; skimmed milk.
q 15712	Jentze De Young, Hingham,	Total solids, 11.44 per cent.; fat, 3.60 per cent.; contained added water.
20008–D	Joseph Golart, Gloucester,	Total solids, 11.52 per cent.; fat, 2.80 per cent.; proteins, 3.05 per cent.; skimmed milk.
27245	P. Holmbert, Gloucester,	Total solids, 10.04 per cent.; fat, 2.90 per cent.; contained added water.
q 15678	Charles Merry, Gloucester,	Total solids, 10.64 per cent.; fat, 1.60 per cent.; proteins, 3.46 per cent.; skimmed milk.
1408–A	Charles G. Mullen, Milton,	Total solids, 12.52 per cent.; fat, 2.90 per cent.; proteins, 3.48 per cent.; skimmed milk.
1508–A	Eliza H. Perley, Ipswich,	Total solids, 10.60 per cent.; fat, 3.60 per cent.; contained added water.
10010–B	Manuel Simmons, Gloucester,	Total solids, 11.18 per cent.; fat, 2.20 per cent.; proteins, 3.29 per cent.; skimmed milk.
669–T	Charles Sughrue, Westford,	Total solids, 10.34 per cent.; fat, 2.90 per cent.; contained added water.
10015–C	George T. Trevoy, Gloucester,	Total solids, 10.60 per cent.; fat, 2.60 per cent.; proteins, 3 per cent.; skimmed milk.
20005–D	Joseph E. Williams, Gloucester,	Total solids, 11.64 per cent.; fat, 2.80 per cent.; proteins, 3.27 per cent.; skimmed milk.
q 15686	C. F. Young, Lanesville,	Total solids, 9.90 per cent.; fat, 2.50 per cent.; contained added water.

RETURNS OF DISEASES.

Cases of Diseases declared by the State Department of Health to be Dangerous to the Public Health.

[Under the provisions of section 52 of chapter 75 of the Revised Laws.]

DISEASE.	Week ending —				
	Apr. 3.	Apr. 10.	Apr. 17.	Apr. 24.	Total.
Actinomycosis,	–	–	–	1	1
Anterior poliomyelitis,	1	–	–	–	1
Cerebro-spinal meningitis,	3	1	4	6	14
Chicken-pox,	103	98	149	137	487
Diphtheria,	143	152	158	155	608
Dog bite (requiring antirabic treatment),	5	2	14	–	21
German measles,	21	24	36	33	114
Infectious diseases of the eye: —					
(*a*) Ophthalmia neonatorum,	71	55	66	64	256
(*b*) Suppurative conjunctivitis,	8	10	9	6	33
(*c*) Trachoma,	–	2	–	–	2
Malaria,	1	–	1	1	3
Measles,	746	991	1,012	1,138	3,887
Mumps,	86	72	88	66	310
Pellagra,	2	–	–	–	2
Rabies,	–	–	1	–	1
Scarlet fever,	306	276	226	240	1,048
Septic sore throat,	5	7	7	74	93
Tetanus,	–	–	–	1	1
Tuberculosis, pulmonary (or not classified),	196	134	171	149	650
Tuberculosis, other forms,	12	16	4	7	39
Tuberculous meningitis,	1	2	–	5	8
Typhoid fever,	13	17	11	21	62
Whooping cough,	126	104	121	152	503

RETURNS OF DEATHS.

Weekly Returns of Deaths from Diseases declared by the State Department of Health to be Dangerous to the Public Health in Cities and Towns in Massachusetts.

[Under the provisions of chapter 210, Acts of 1913.]

Week ending April 3, 1915.

CITIES AND TOWNS.	Population. Census for 1910.	Cerebro-spinal Meningitis.	Chicken-pox.	Diphtheria.	German Measles.	Measles.	Ophthalmia Neonatorum.	Scarlet Fever.	Septic Sore Throat.	Tuberculosis, Pulmonary (or not classified).	Tuberculosis, Other Forms.	Typhoid Fever.	Whooping Cough.
Boston,	686,092	–	–	7	–	2	1[1]	4[1]	1	24[2]	1	1	1
Worcester,	145,986	1	–	–	–	–	–	1	–	–	–	–	2
Fall River,	119,295	–	–	1	–	–	–	–	–	5	–	–	1
Lowell,	106,294	–	–	1	–	–	–	–	–	2	1	–	1
Cambridge,	104,839	–	–	1	–	–	–	–	–	5	–	–	–
New Bedford,	96,652	–	–	1	–	–	–	–	–	3	1	–	–
Lynn,	89,336	–	–	–	–	–	–	–	–	–	–	–	–
Springfield,	88,926	–	–	–	–	–	–	–	–	–	–	–	–
Lawrence,	85,892	–	–	–	–	–	–	–	–	–	–	–	–
Somerville,	77,236	–	–	–	–	–	–	–	–	3	–	–	–
Holyoke,	57,730	–	–	–	–	–	–	–	–	2	–	–	–
Brockton,	56,878	–	–	1	–	–	–	–	–	1	–	–	–
Malden,	44,404	–	–	–	–	–	–	–	–	–	–	–	–
Haverhill,	44,115	–	–	–	–	–	–	–	–	2	–	–	–
Salem,	43,697	–	–	–	–	–	–	–	–	–	–	–	–
Newton,	39,806	2	–	–	–	–	–	–	–	–	–	–	–
Fitchburg,	37,826	–	–	–	–	–	–	1	–	–	–	–	–
Taunton,	34,259	–	–	–	–	–	–	–	–	1	–	–	–
Everett,	33,484	–	–	–	–	–	–	–	–	–	–	–	–
Quincy,	32,642	–	–	–	–	–	–	–	–	–	–	–	–
Chelsea,	32,452	–	–	–	–	–	–	–	–	–	–	–	–

Week ending April 3, 1915 — Concluded.

CITIES AND TOWNS.	Population. Census for 1910.	Cerebro-spinal Meningitis.	Chicken-pox.	Diphtheria.	German Measles.	Measles.	Ophthalmia Neonatorum.	Scarlet Fever.	Septic Sore Throat.	Tuberculosis Pulmonary (or not classified).	Tuberculosis, Other Forms.	Typhoid Fever.	Whooping Cough.
Pittsfield,	32,121	-	-	-	-	-	-	-	-	-	-	-	-
Waltham,	27,834	-	-	-	-	-	-	-	-	-	-	-	-
Brookline,	27,792	-	-	-	-	-	-	-	-	-	-	-	-
Chicopee,	25,401	-	-	-	-	-	-	-	-	1	-	-	-
Gloucester,	24,398	-	-	-	-	-	-	-	-	-	-	-	-
Medford,	23,150	-	-	-	-	-	-	-	-	-	-	-	-
North Adams,	22,019	-	-	-	-	-	-	-	-	-	-	-	-
Northampton,	19,431	-	-	-	-	-	-	-	-	-	-	-	-
Beverly,	18,650	-	-	-	-	-	-	-	-	-	-	-	-
Revere,	18,219	-	-	-	-	-	-	-	-	-	-	-	-
Leominster,	17,580	-	-	1	-	-	-	-	-	-	-	-	-
Attleboro,	16,215	-	-	-	-	-	-	-	-	-	-	-	-
Westfield,	16,044	-	-	-	-	-	-	-	-	-	-	-	-
Peabody,	15,721	-	-	-	-	-	-	-	-	-	-	-	-
Melrose,	15,715	-	-	-	-	-	-	-	-	-	-	-	-
Woburn,	15,308	-	-	-	-	-	-	1	-	-	1	-	-
Newburyport,	14,949	-	-	-	-	-	-	-	-	-	-	-	-
Gardner,	14,699	-	-	-	-	-	-	-	-	-	-	-	-
Marlborough,	14,579	-	-	-	-	-	-	-	-	-	-	-	-
Clinton,	13,075	-	-	-	-	-	-	-	-	-	-	-	-
Milford,	13,055	-	-	-	-	-	-	-	-	-	-	-	-
Adams,	13,026	-	-	-	-	-	-	-	-	-	-	-	-
Framingham,	12,948	-	-	-	-	-	-	-	-	-	-	-	-
Weymouth,	12,895	-	-	-	-	-	-	-	-	-	-	-	-
Watertown,	12,875	-	-	-	-	-	-	-	-	-	1	-	-
Southbridge,	12,592	-	-	-	-	-	-	-	-	-	-	-	-
Plymouth,	12,141	-	-	-	-	-	-	-	-	-	-	-	-
Webster,	11,509	-	-	-	-	-	-	-	-	-	-	-	-
Methuen,	11,448	-	-	-	-	-	-	-	-	-	-	-	-
Wakefield,	11,404	-	-	-	-	-	-	-	-	-	-	-	-

Arlington,	11,187	–	–	–	–	–	–	–	–	–	–	–	–
Greenfield,	10,427	–	–	–	–	–	–	–	–	–	–	–	–
Winthrop,	10,132	–	–	–	–	–	–	–	–	–	–	–	–
Total of reporting cities and towns of more than 10,000 population,	1,678,172	3	–	13	–	2	1	7	1	49	5	1	5
Bridgewater,	7,688	–	–	–	–	–	–	–	–	2	–	–	–
Fairhaven,	5,122	–	–	–	–	–	1	–	–	–	–	–	–
Total of reporting towns of less than 10,000 population,	12,810	–	–	–	–	–	1	–	–	2	–	–	–

[1] One nonresident deducted.

[2] Two nonresidents deducted.

Week ending April 10, 1915.

CITIES AND TOWNS.	Population. Census for 1910.	Cerebro-spinal Meningitis.	Chicken-pox.	Diphtheria.	German Measles.	Measles.	Ophthalmia Neonatorum.	Scarlet Fever.	Septic Sore Throat.	Tuberculosis, Pulmonary (or not classified).	Tuberculosis, Other Forms.	Typhoid Fever.	Whooping Cough.
Boston,	686,092	–	–	7[1]	–	–	–	1[1]	–	31[2]	6[3]	–	4
Worcester,	145,986	–	–	1	–	–	–	–	–	1	1	–	1
Fall River,	119,295	–	–	–	–	–	–	–	–	1	–	1	1
Lowell,	106,294	–	–	–	–	–	–	–	–	3	–	–	–
Cambridge,	104,839	–	–	2	–	1	–	–	–	9	–	–	–
New Bedford,	96,652	–	–	–	–	–	–	–	–	4	–	–	–
Lynn,	89,336	–	–	–	–	–	–	–	–	–	–	–	–
Springfield,	88,926	–	–	–	–	–	–	–	–	4	–	–	–
Lawrence,	85,892	–	–	–	–	–	–	–	–	–	–	–	–
Somerville,	77,236	–	–	–	–	–	–	1	–	2	1	–	–
Holyoke,	57,730	–	–	–	–	–	–	–	–	–	–	–	–
Brockton,	56,878	–	–	–	–	–	–	–	–	–	1	–	–
Malden,	44,404	–	–	2	–	–	–	–	–	–	1	–	–
Haverhill,	44,115	–	–	–	–	1	–	–	–	1	–	–	–
Salem,	43,697	–	–	–	–	–	–	–	–	–	–	–	–
Newton,	39,806	–	–	–	–	–	–	–	–	–	–	–	–
Fitchburg,	37,826	–	–	–	–	–	–	–	–	–	–	–	–
Taunton,	34,259	–	–	–	–	–	–	–	–	3	1	–	–
Everett,	33,484	–	–	–	–	–	–	–	–	–	–	–	–
Quincy,	32,642	–	–	–	–	–	–	–	–	–	–	–	–
Chelsea,	32,452	–	–	–	–	–	–	–	–	–	–	–	–
Pittsfield,	32,121	–	–	–	–	–	–	–	–	–	–	–	–
Waltham,	27,834	–	–	–	–	–	–	–	–	–	–	–	–
Brookline,	27,792	–	–	–	–	–	–	–	–	–	–	–	–
Chicopee,	25,401	–	–	–	–	–	–	–	–	–	–	–	–
Gloucester,	24,398	–	–	–	–	–	–	–	–	–	–	–	–
Medford,	23,150	–	–	–	–	–	–	–	–	1	–	–	–
North Adams,	22,019	–	–	1	–	–	–	–	–	–	–	–	–
Northampton,	19,431	–	–	–	–	–	–	–	–	2	–	–	–
Beverly,	18,650	–	–	1	–	–	–	–	–	1	–	–	–
Revere,	18,219	–	–	–	–	–	–	–	–	–	–	–	–
Leominster,	17,580	–	–	1	–	–	–	–	–	–	–	–	–

Attleboro,	16,215	-	-	-	-	-	-	-	-	-	-	-	-
Westfield,	16,044	-	-	-	-	-	-	-	-	1[1]	-	-	-
Peabody,	15,721	-	-	-	-	-	-	-	-	-	-	-	-
Melrose,	15,715	-	-	-	-	-	-	-	-	-	1	-	-
Woburn,	15,308	-	-	-	-	-	-	-	-	1	-	-	-
Newburyport,	14,949	-	-	-	-	-	-	-	-	-	-	-	-
Gardner,	14,699	-	-	-	-	-	-	-	-	-	-	-	-
Marlborough,	14,579	-	-	-	-	-	-	-	-	-	-	-	-
Clinton,	13,075	-	-	-	-	-	-	-	-	1	-	-	-
Milford,	13,055	-	-	-	-	-	-	-	-	-	-	-	-
Adams,	13,026	-	-	-	-	-	-	-	-	1	-	-	-
Framingham,	12,948	-	-	-	-	-	-	-	-	-	-	-	-
Weymouth,	12,895	-	-	-	-	-	-	-	-	-	-	-	-
Watertown,	12,875	-	-	-	-	-	-	-	-	-	-	-	-
Southbridge,	12,592	-	-	-	-	-	-	-	-	-	-	-	-
Plymouth,	12,141	-	-	-	-	-	-	-	-	-	-	-	-
Webster,	11,509	-	-	-	-	-	-	-	-	-	-	-	-
Methuen,	11,448	-	-	-	-	-	-	-	-	-	-	-	-
Wakefield,	11,404	-	-	-	-	-	-	-	-	-	-	-	-
Arlington,	11,187	-	-	-	-	-	-	-	-	-	-	-	-
Greenfield,	10,427	-	-	-	-	-	-	-	-	-	-	-	-
Winthrop,	10,132	-	-	-	-	-	-	-	-	-	-	-	-
Total of reporting cities and towns of more than 10,000 population,	1,778,974	-	-	15	-	2	-	2	-	67	12	1	6
North Attleborough,	9,562	-	-	1	-	-	-	-	-	-	-	-	-
Norwood,	8,014	-	-	1	-	-	-	-	-	-	-	-	-
Fairhaven,	5,122	-	-	-	-	1	-	1	-	-	-	-	-
Lancaster,	2,464	-	-	-	-	-	-	-	-	1	-	-	-
Russell,	965	-	-	-	-	-	-	-	-	-	-	-	1
Total of reporting towns of less than 10,000 population,	26,127	-	-	2	-	1	-	1	-	1	-	-	1

[1] One nonresident.

[2] Four nonresidents.

[3] Two nonresidents.

Week ending April 17, 1915.

CITIES AND TOWNS.	Population. Census for 1910.	Cerebro-spinal Meningitis.	Chicken-pox.	Diphtheria.	German Measles.	Measles.	Ophthalmia Neonatorum.	Scarlet Fever.	Septic Sore Throat.	Tuberculosis, Pulmonary (or not classified).	Tuberculosis, Other Forms.	Typhoid Fever.	Whooping Cough.
Boston,	686,092	–	–	6^1	–	1^2	–	6^3	–	26^3	2	–	–
Worcester,	145,986	–	–	–	–	–	–	–	–	2	2	–	–
Fall River,	119,295	–	–	–	–	1	–	–	–	4	–	–	1
Lowell,	106,294	–	–	1	–	–	–	–	–	5	–	1	–
Cambridge,	104,839	–	–	–	–	–	–	–	–	5	–	–	1
New Bedford,	96,652	–	–	–	–	–	–	–	–	5	–	1	–
Lynn,	89,336	–	–	–	–	–	–	–	–	3	–	–	–
Springfield,	88,926	–	–	–	–	–	–	–	–	3	–	–	–
Lawrence,	85,892	–	–	–	–	–	–	–	–	–	–	–	–
Somerville,	77,236	–	–	–	–	1	–	–	–	1	–	–	–
Holyoke,	57,730	–	–	–	–	–	–	–	–	2	2	–	–
Brockton,	56,878	–	–	–	–	–	–	–	–	4	–	–	–
Malden,	44,404	–	–	1	–	–	–	–	–	2	–	–	–
Haverhill,	44,115	–	–	–	–	–	–	–	–	–	–	–	–
Salem,	43,697	–	–	–	–	–	–	–	–	–	–	–	–
Newton,	39,806	–	–	–	–	–	–	–	–	1	1	–	–
Fitchburg,	37,826	–	–	–	–	–	–	–	–	–	–	–	–
Taunton,	34,259	–	–	–	–	–	–	2	–	–	–	–	–
Everett,	33,484	–	–	–	–	–	–	–	–	–	2	–	–
Quincy,	32,642	–	–	–	–	–	–	–	–	–	–	–	–
Chelsea,	32,452	–	–	–	–	–	–	–	–	–	–	–	–
Pittsfield,	32,121	–	–	–	–	–	–	–	–	–	–	–	–
Waltham,	27,834	–	–	–	–	–	–	–	–	1	–	–	–
Brookline,	27,792	–	–	–	–	–	–	–	–	–	–	–	–
Chicopee,	25,401	–	–	–	–	–	–	–	–	2	–	–	–
Gloucester,	24,398	–	–	–	–	–	–	–	–	–	–	–	–
Medford,	23,150	–	–	–	–	–	–	–	–	–	1	–	–
North Adams,	22,019	–	–	–	–	–	–	–	–	–	–	–	–
Northampton,	19,431	–	–	–	–	–	–	–	–	–	–	–	–
Beverly,	18,650	–	–	–	–	–	–	–	–	1	–	–	–
Revere,	18,219	–	–	–	–	–	–	–	–	–	–	–	–
Leominster,	17,580	–	–	1	–	–	–	–	–	–	–	–	–

Attleboro,	16,215	–	–	–	–	–	–	–	–	–	–	–	–
Westfield,	16,044	–	–	–	–	–	–	–	–	–	–	–	–
Peabody,	15,721	–	–	–	–	–	–	–	–	–	1	–	–
Melrose,	15,715	–	–	–	–	–	–	–	–	–	–	–	–
Woburn,	15,308	–	–	–	–	–	–	–	–	–	–	–	–
Newburyport,	14,949	–	–	1	–	–	–	–	–	1	–	–	–
Gardner,	14,699	–	–	–	–	–	–	–	–	–	–	–	–
Marlborough,	14,579	–	–	–	–	–	–	–	–	–	–	–	–
Clinton,	13,075	–	–	–	–	–	–	–	–	–	–	–	–
Milford,	13,055	–	–	–	–	–	–	–	–	–	–	–	–
Adams,	13,026	–	–	–	–	–	–	–	–	–	–	–	–
Framingham,	12,948	–	–	–	–	–	–	–	–	–	–	–	–
Weymouth,	12,895	–	–	–	–	–	–	–	–	–	–	–	–
Watertown,	12,875	–	–	–	–	–	–	–	–	–	–	–	–
Southbridge,	12,592	–	–	2	–	–	–	–	–	1	–	–	–
Plymouth,	12,141	–	–	–	–	–	–	–	–	–	–	–	–
Webster,	11,509	–	–	–	–	–	–	–	–	–	–	–	–
Methuen,	11,448	–	–	1	–	–	–	–	–	–	–	–	–
Wakefield,	11,404	–	–	–	–	–	–	–	–	–	–	–	1
Arlington,	11,187	–	–	–	–	–	–	–	–	–	–	–	–
Greenfield,	10,427	–	–	–	–	–	–	–	–	–	–	–	–
Winthrop,	10,132	–	–	–	–	–	–	–	–	–	–	–	–
Total of reporting cities and towns of more than 10,000 population,	1,948,498	–	–	13	–	3	–	8	–	69	11	2	3
Concord,	6,421	–	–	1	–	–	–	–	–	–	–	–	–
Blackstone,	5,648	2	–	–	–	–	–	–	–	1	–	–	–
Belmont,	5,542	–	–	–	–	–	–	–	–	1	–	–	–
North Andover,	5,529	–	–	–	–	–	–	–	–	–	1	–	–
Wellesley,	5,413	1	–	–	–	–	–	–	–	–	–	–	–
Mansfield,	5,183	–	–	–	–	–	–	–	–	1	–	–	–
Fairhaven,	5,122	–	1	–	–	–	–	–	–	–	–	–	–
Duxbury,	1,688	1	–	–	–	–	–	–	–	–	–	–	–
Total of reporting towns of less than 10,000 population,	40,546	4	1	1	–	–	–	–	–	3	1	–	–

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[1] Two nonresidents.

[2] One nonresident.

[3] Three nonresidents.

Week ending April 24, 1915.

CITIES AND TOWNS.	Population. Census for 1910.	Cerebro-spinal Meningitis.	Chicken-pox.	Diphtheria.	German Measles.	Measles.	Ophthalmia Neonatorum.	Scarlet Fever.	Septic Sore Throat.	Tuberculosis, Pulmonary (or not classified).	Tuberculosis, Other Forms.	Typhoid Fever.	Whooping Cough.
Boston,	686,092	–	–	1	–	–	–	3[1]	2[1]	18[2]	5	–	2
Worcester,	145,986	–	–	–	–	–	–	–	–	3	1	–	–
Fall River,	119,295	–	–	–	–	–	–	–	–	–	–	–	–
Lowell,	106,294	–	–	–	–	–	–	–	–	2	2	–	–
Cambridge,	104,839	–	–	2	–	2	–	1	–	3	–	–	–
New Bedford,	96,652	–	–	1	–	1	–	1	–	2	1	1	–
Lynn,	89,336	–	–	–	–	–	–	–	–	2	–	–	–
Springfield,	88,926	–	–	–	–	–	–	–	–	1	1	–	–
Lawrence,	85,892	1	–	1	–	1	–	1	–	5	1	–	2
Somerville,	77,236	–	–	–	–	1	–	–	–	–	–	–	–
Holyoke,	57,730	–	–	–	–	–	–	–	–	1	–	–	–
Brockton,	56,878	–	–	–	–	–	–	–	–	1	–	–	–
Malden,	44,404	–	–	1	–	–	–	–	–	–	–	–	–
Haverhill,	44,115	–	–	–	–	–	–	–	–	2	1	–	–
Salem,	43,697	–	–	–	–	–	–	–	–	2	–	–	–
Newton,	39,806	–	–	–	–	–	–	1	–	1	–	–	–
Fitchburg,	37,826	–	–	2	–	–	–	–	–	2	–	–	–
Taunton,	34,259	–	–	–	–	–	–	1	–	1	–	–	–
Everett,	33,484	–	–	–	–	–	–	–	–	–	–	–	–
Quincy,	32,642	–	–	–	–	–	–	–	–	–	–	–	–
Chelsea,	32,452	–	–	–	–	–	–	–	–	–	–	–	–
Pittsfield,	32,121	–	–	–	–	–	–	–	–	1	–	–	–
Waltham,	27,834	–	–	–	–	–	–	–	–	1	–	–	–
Brookline,	27,792	–	–	–	–	–	–	–	–	–	–	–	–
Chicopee,	25,401	–	–	–	–	–	–	–	–	1	–	–	–
Gloucester,	24,398	–	–	–	–	–	–	–	–	11	–	–	–
Medford,	23,150	–	–	–	–	–	–	–	–	1	–	–	–
North Adams,	22,019	–	–	–	–	–	–	–	–	1	–	–	–
Northampton,	19,431	–	–	–	–	–	–	–	–	–	–	–	–
Beverly,	18,650	–	–	–	–	–	–	–	–	–	–	–	–
Revere,	18,219	–	–	–	–	–	–	–	–	–	–	–	–
Leominster,	17,580	–	–	–	–	–	–	–	–	1	–	–	–

Attleboro,	16,215	-	-	-	-	-	-	-	-	-	-	-	-
Westfield,	16,044	-	-	-	-	-	-	-	-	-	-	-	-
Peabody,	15,721	-	-	-	-	-	-	-	-	1	-	-	-
Melrose,	15,715	-	-	-	-	-	-	-	-	-	-	-	-
Woburn,	15,308	-	-	-	-	-	-	-	-	-	-	-	-
Newburyport,	14,949	-	-	-	-	-	-	-	-	-	-	-	-
Gardner,	14,699	-	-	-	-	-	-	-	-	-	-	-	-
Marlborough,	14,579	-	-	-	-	-	-	-	-	-	-	-	-
Clinton,	13,075	-	-	-	-	-	-	-	-	-	-	-	-
Milford,	13,055	-	-	-	-	-	-	-	-	-	-	-	-
Adams,	13,026	-	-	-	-	-	-	-	-	-	-	-	-
Framingham,	12,948	-	-	-	-	-	-	-	-	1	-	-	-
Weymouth,	12,895	-	-	-	-	-	-	-	-	-	-	-	-
Watertown,	12,875	-	-	-	-	-	-	-	-	-	-	-	-
Southbridge,	12,592	-	-	-	-	-	-	-	-	-	-	-	-
Plymouth,	12,141	-	-	-	-	-	-	-	-	-	-	-	-
Webster,	11,509	-	-	-	-	-	-	-	-	-	-	-	-
Methuen,	11,448	-	-	-	-	-	-	-	-	-	-	-	-
Wakefield,	11,404	-	-	-	-	-	-	-	-	-	-	-	-
Arlington,	11,187	-	-	-	-	-	-	-	-	-	-	-	-
Greenfield,	10,427	-	-	-	-	-	-	-	-	-	-	-	-
Winthrop,	10,132	-	-	-	-	-	-	-	-	-	-	-	-
Total of reporting cities and towns of more than 10,000 population,	1,941,180	1	-	8	-	5	-	8	2	65	12	1	4
Bridgewater,	7,688	-	-	-	-	-	-	-	-	1	-	-	-
Barnstable,	4,676	-	-	-	-	-	-	-	-	1	-	-	-
Acton,	2,136	-	-	-	-	-	-	-	-	1	-	-	-
Hull,	2,103	-	-	3	-	-	-	1	-	-	-	-	-
Avon,	2,013	-	-	-	-	-	-	-	-	1	-	-	-
Lakeville,	1,141	-	-	-	-	-	-	-	-	4	-	-	-
Total of reporting towns of less than 10,000 population,	19,757	-	-	3	-	-	-	1	-	8	-	-	-

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[1] One nonresident.

[2] Two nonresidents.

TYPHOID FEVER IN MANSFIELD.

During the months of August, September and October, 1914, and March, 1915, there were 47 cases of typhoid fever reported to the Board of Health of Mansfield.

For the six preceding years there had been but 3 cases, 2 in 1911 and 1 in 1913.

In the recent outbreaks, which were six months apart, 29 cases were reported in 1914 and 18 in 1915, the majority of the patients being women and children.

Investigations were made during the fall outbreak and it was found that all of the cases were on the route of one milk dealer. On account of this fact, and of the explosive character of the outbreak, it was concluded that the infection was conveyed by milk. The dealer in question, who supplied about 160 families, was not a producer but purchased from five dairies in the neighborhood. No cases of disease were discovered at any of these farms. Unfortunately, no specimens of blood from any of the milk dealers involved were examined by the Widal test.

No more cases of typhoid fever occurred in the town until the first of March, 1915, when, in the course of ten days, 18 cases were reported, all of the patients taking milk from this dealer. The second outbreak was of the same character as the preceding.

The milk supply from this dairy was shut off. Laboratory investigations were undertaken immediately. Widal tests were made of the blood from members of the family of the milk dealer and those selling to him. A positive Widal reaction was obtained from the blood of the child of the milk dealer and an atypical reaction in the case of the wife. Typhoid bacilli were isolated from the urine of the child.

Considered epidemiologically, it seemed as if there were a common source of infection for these two outbreaks. There is the possibility that the milk dealer's wife and child, who visited Rhode Island in July, 1914, may have become infected there with typhoid and one or both become carriers.

NEW LEGISLATION.

GENERAL ACTS.

CHAPTER 239.

AN ACT RELATIVE TO THE STANDARD OF VINEGAR AND TO THE SALE THEREOF.

Be it enacted, etc., as follows:

SECTION 1. Section sixty-seven of chapter fifty-seven of the Revised Laws, as amended by section two of chapter six hundred of the acts of the year nineteen hundred and eleven, is hereby amended by striking out after the words "cider-vinegar solids", in the sixth line, the words "upon full evaporation at the temperature of boiling water", and by adding at the end of the section the words: — The commissioner of health shall determine or cause to be determined, from time to time, analytical methods for the estimation of solids and of acetic acid in vinegar, and said methods shall be published in the monthly bulletin of the state department of health. No persons shall estimate the solids or the acetic acid content of vinegar for determining the composition or value of said vinegar as a basis for payment in buying or in selling, or for the purpose of inspection, by methods other than those published as herein described, — so as to read as follows: — *Section 67.* Vinegar shall contain no added or artificial coloring matter, and shall contain not less than four and one half per cent, by weight, of absolute acetic acid. Cider vinegar shall in addition contain not less than one and eight tenths per cent by weight, of cider vinegar solids. If vinegar contains any added or artificial coloring matter, or less than the required amount of acidity, or if cider vinegar contains less than the required amount of acidity or of cider vinegar solids, it shall be deemed to be adulterated. The commissioner of health shall determine or cause to be determined, from time to time, analytical methods for the estimation of solids and of acetic acid in vinegar, and said methods shall be published in the monthly bulletin of the state department of health. No person shall estimate the solids or the acetic acid content of vinegar for determining the composition or value of said vinegar as a basis for payment in buying or in selling, or for the purpose of inspection, by methods other than those published as herein described.

SECTION 2. This act shall take effect upon the first day of July, in the year nineteen hundred and fifteen. [*Approved May 10, 1915.*

CHAPTER 258.

AN ACT RELATIVE TO THE MANUFACTURE OF BREAD TO BE SOLD BY THE LOAF.

Be it enacted, etc., as follows:

SECTION 1. Bread manufactured to be sold by the loaf shall be made from one or more of the following substances: — wheat flour, rye flour, corn flour, lard, vegetable oils, butter, sugar, malt extract, corn syrup, salt, yeast, water, milk, corn sugar, cereal flakes and any other substance commonly sold at retail as food. Bread in the manufacture of which any other materials are added shall have affixed thereto a label upon which shall be distinctly and conspicuously printed in straight parallel lines of plain, uncondensed, legible type in Gothic letters not less than one fourth of an inch high, in the English language, well spaced on a plain ground, a statement indicating the presence of such other materials: *provided, however*, that no materials of any kind shall be used which are poisonous or which are injurious to health.

SECTION 2. Whoever by himself or by his agents, or as the servant or agent of another, violates any provision of this act shall be punished by a fine of not more than five hundred dollars or by imprisonment for not more than one year.

SECTION 3. The state department of health, boards of health of cities and towns, and their authorized agents, shall have the right to enter all bakeries and other places where bread is made or baked for sale, and may take samples of bread and specimens of all materials used in the manufacture of bread. Whoever prevents, obstructs, or interferes with the state department of health, a board of health, or any agent of the department or of any such board in the performance of its or his duties as specified herein, or hinders, obstructs or interferes with any inspection or examination authorized hereby, shall be punished by a fine of not more than five hundred dollars or by imprisonment for not more than one year. [*Approved May 15, 1915.*

MASSACHUSETTS STATE DEPARTMENT OF HEALTH.

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Division of Sanitary Engineering,	Director, X. H. Goodnough, C.E.
Division of Communicable Diseases,	Director, E. R. Kelley, M.D.
Division of Water and Sewage Laboratories,	Director, H. W. Clark.
Division of Antitoxin and Vaccine Laboratories,	Director and Pathologist, Milton J. Rosenau, M.D.
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PUBLIC HEALTH BULLETIN

ISSUED MONTHLY

BY THE

STATE DEPARTMENT OF HEALTH

OF MASSACHUSETTS

MAY–JUNE, 1915

Vol. 2, Nos. 5 and 6

ALLAN J. McLAUGHLIN, M.D., *Commissioner*

"THE COMMON HEALTH OF THE COMMONWEALTH"

Entered as Second-class Matter Oct. 26, 1914, at the Post Office at Boston, Mass.,
under the Act of Aug. 24, 1912

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Approved by
The State Board of Publication.

THE COMMON HEALTH OF THE COMMONWEALTH.

His Excellency David I. Walsh, Governor of Massachusetts.

BECAUSE the public health is the foundation upon which rests the happiness of the people and the welfare of the State, I feel that the Commonwealth is to be congratulated this morning upon the gathering together of so many active workers in the field of health conservation.

If there has been any one governmental problem in which I have been more vitally interested than any other it is that of preserving the public health. My interest in this problem has been actuated largely by a realization of the importance of having the government assist in reducing to a minimum the misery, distress, suffering and waste caused by disease and death. I have been ambitious — intensely so — that my service to the Commonwealth of Massachusetts might be remembered, long after I am removed from it, for the progress and advancement of our health organization and for the encouragement of the efforts of those unselfishly devoted to the public health.

I deem it a special pleasure, therefore, to have a part in welcoming the public health officials of the various municipalities and also the many public-spirited citizens who are devoted to this cause and have long appreciated its importance. We are making history here to-day. No gathering like this has ever before taken place in Massachusetts, and its possibilities cannot be estimated or measured.

Sanitary science has to a great extent, within our lifetime, overcome the former ignorance of the causes of disease, and has discovered the most effective means for their prevention. We in Massachusetts are entitled to congratulate ourselves upon our share in applying to the common advantage the great discoveries of modern sanitary science. We do not, however, forget that much remains to be done and that we should be false to ourselves and to coming generations if we did not ever press on toward new achievements in the conquest of disease.

To illustrate the field which is still before us to be explored and the progress which you may still hope by faithful efforts to attain, permit me to call to your attention a few facts gathered from the death

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Note. — Address of welcome to the Convention of Public Health Officials and the Massachusetts Association of Boards of Health, Boston, Mass., April 29, 1915.

records of Massachusetts in the year 1913. A fact which stands out in startling prominence is, that of the 53,286 deaths which occurred in that year no less than 13,661 were of children under five years of age. While we do not forget that infant mortality has been greatly reduced by the progress of sanitary science in recent years, is it not evident that this proportion is even yet frightfully high, and that we should bend every effort for a still greater reduction of this terrible infant mortality? Education of mothers in matters pertaining to infant hygiene is evidently the one need of the hour which is of more importance from the health standpoint than any other. I trust that the enthusiasm generated in this meeting may reach out into the entire Commonwealth, and may be reflected in the health and happiness of many a household.

I am especially glad of the opportunity which this gathering affords of bringing the workers for public health throughout the Commonwealth into closer contact with our State Health Department, of which in its present condition the Commonwealth of Massachusetts may well be proud. To be in the highest degree successful, the ablest department of health must have the earnest co-operation and good will of the local officers and boards of health. I commend to you most heartily Dr. McLaughlin, the Commissioner, his eminent Public Health Council and all their co-workers and subordinates. This is a field of work in which party lines have no place, political distinctions may be forgotten, and all may work heartily together for a common end, — the good of humanity.

As we survey the field, we must note that while some diseases, such as diphtheria and typhoid fever, have decreased to a marked extent in recent years, and the deaths from tuberculosis even are less numerous than they were ten years ago, there is still much room for improvement even in these respects, while there are other diseases whose destructiveness appears to be upon the increase. This is the case notably with pneumonia, the number of deaths from which has been growing annually for several years. The same is true of the so-called "wear-and-tear diseases" of middle life, diseases of the heart and blood vessels, and of the kidneys and the brain, and also of the scourge of cancer. The mortality from these ills is evidently excessive, and the problem of reducing it is at present even more pressing than that presented by the communicable diseases.

The New York Health Commissioner in his last annual report has declared his conviction that it is possible, by the proper sanitary precautions, to add at least five years to the lifetime of each individual who has reached the age of forty-five. His opinion must make a profound impression upon us all when we think what it would mean to the Commonwealth were five years of service added to the lives of the distinguished and useful fellow citizens whose premature death from some of these diseases we have so often occasion to lament. I will not trench, however, upon the province of the eminent specialists who will address you upon the specific measures which are to be taken into consideration in combating the ever-present and insidious enemies of the public health; I wish only to impress upon you that upon your individual activities in your own local spheres of influence, upon your zeal and faithfulness in imparting to your neighbors the saving knowledge which has been gathered by the scientists of to-day, is dependent very largely the sanitary education of the entire citizenship and the general prolongation of life and happiness which is our common aim. You must bend your best efforts to the enlightenment of the people in these vital matters. The Commonwealth relies upon you for this service, and I believe that this reliance is well placed and will be justified by your increased devotion and enthusiasm during the coming year as a result of this important gathering, which I consider one of the most significant events of the present year.

THE MAIN POINTS OF ATTACK IN THE CAMPAIGN FOR PUBLIC HEALTH.[1]

DR. CHARLES W. ELIOT,

President Emeritus of Harvard University.

THE progress in knowledge of preventive medicine made during the past fifty years, and in applications of that knowledge in social practice, has been the most cheerful phenomenon in the recent history of civilization. The new applications of physical forces — heat, light, and electricity, which mankind has learned to use in its conflict with nature — have proved to be highly beneficent in the field of preventive medicine. Civilized communities have been enabled to make their water supplies, food supplies, and drainage systems safe, and to contend with unexampled success against formidable pestilences, the common communicable diseases, and the bodily ills which attend urban life and the factory system. In Massachusetts the organization of the public health service has, within ten years, been made for the first time thoroughly efficient; and the State Department of Health has lately been much strengthened through public appreciation of its beneficent work, and the coöperative good will of the Legislature and the Executive.

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[1] Address before the Convention of Public Health Officials and the Massachusetts Association of Boards of Health, Boston, Mass., April 29, 1915.

Great as recent progress has been in Massachusetts in this invaluable branch of the public service, it is obvious that much more remains to be done; and I hope on this fortunate occasion to be able to set before this professional audience certain lines of work in which there is urgent need of more strenuous medical activity, of more expenditure on the part of the public, and of more well-informed zeal on the part of all persons interested in the welfare of the community.

The first subject to which I venture to direct your attention is the public treatment of tuberculosis. All boards of health — we just listened to a long list of Massachusetts boards of health apparently in abeyance — all boards of health should concern themselves actively with making ample provision all over the State for the treatment of incipient cases of tuberculosis, especially among the young, under the most favorable possible conditions, for the segregation of advanced cases, and for the diffusion among the entire population of knowledge of the means of preventing the spread of the disease through contagion. The contagiousness of tuberculosis has been widely taught for a generation past; but that knowledge has not penetrated to every class of the population; so that foci of infection are constantly established and maintained without the knowledge of the health authorities, and without adequate public control. On the other hand, there is danger that some tuberculous patients may suffer from lack of care; because the persons around them, acquainted with the contagiousness of the disease, but not knowing how to make themselves safe, neglect or avoid the sufferers. It should be the duty of medical practitioners not only to report the deaths from tuberculosis, but to report their current cases, together with a statement that each case is, or is not, properly cared for. The law on this subject is sufficient; but public opinion does not yet compel its systematic enforcement. The number of sanitaria and hospitals devoted to tuberculosis is already considerable, but is far too small; and the local boards of health and the city and town governments are not all awake to their responsibilities and duties on this subject.

The next evil which should be attacked with the utmost vigor by all boards of health is alcoholism. Public opinion needs to be enlightened on two points with regard to the use of alcohol as a beverage. In the first place, it should be brought home to the entire population that the habitual use of alcoholic beverages reduces, in a serious degree, the productive efficiency of the community. The recent public proceedings in Russia, France, and England against the use of alcohol, in order to enhance the efficiency of their population in time of war, have directed public attention to this subject with unusual force. It clearly appears that the great masses of grains and other materials used in the preparation of alcoholic drinks are much worse than wasted, so far as national efficiency is concerned. Millions of tons of grains, hops, and grapes are every year withdrawn from use as human food, and converted into drinks which are not only not nourishing, but distinctly injurious to the human body under all circumstances, unless largely diluted. The entire annual bill of the white race for alcoholic drinks is worse than wasted expenditure; and that bill is huge in every European and American nation. In the second place, recent experiments on the effects of alcohol on the nerves and glands of the human body have demonstrated beyond a doubt that alcohol invariably does harm, and never any good either in health or disease. The use of alcohol as a defense against exposure or fatigue has been given up by all sensible persons. It diminishes the proper control of the nervous system over the rest of the body, and enfeebles that exercise of the will which we call self-control. The habitual use of alcohol is the prolific source of a great variety of diseases and disabilities in the human body, causes many frightful disasters in human reproduction, and contributes to produce in innumerable instances family poverty and distress. Degradation through the use of alcohol is the greatest evil the white race is suffering from; and the evil has not diminished during the last three centuries because of the facile production, on an immense scale, of cheap spirits distilled from grains and potatoes.

This evil is rooted, first, in what are called vested interests, — that is, in the investment of large amounts of capital in the plants which produce, store, and distribute beers, wines, and spirits, and, secondly, in the methods of taxation to which the white nations are accustomed. Heretofore the medical profession and the public health officers have given an uncertain sound concerning the use of alcohol. Many physicians themselves use alcohol habitually or in emergencies, and not infrequently advise its use in both sickness and health and in advanced age. Boards of health have not considered it their function to interfere with, or protest against, its use; and most public authorities have declined to interfere effectively with the distribution and consumption of alcoholic beverages. The efforts of legislatures and courts to prevent even the most obvious abuses of alcoholic drinks have, as a rule, been well-nigh futile. Indeed, the habitual action of police authorities and courts in dealing with habitual drunkards cannot be surpassed in stupidity and inefficiency. Arrest is followed by a period of confinement too brief for cure or reformation; a few weeks of abused liberty follow discharge, and then the hopeless round begins again.

It remains for the boards of health to attack this hideous evil with the weapons and in the spirit of preventive medicine. They should bring to the work all recent knowledge concerning the effects of alcohol on the human body, call to their aid legislators who can find equivalents for the public revenue now derived from the manufacture and sale of alcoholic drinks, and reënforce to the utmost the wise counsellors who by moral teachings have brought about during the past fifty years considerable improvements in regard to the use of alcohol in the more intelligent and conscientious classes.

The next subject to which boards of health should direct their activities is the cure and limitation of venereal diseases. These diseases are the worst which afflict the human race in their effects on the individual sufferer, on the community of today, and on its posterity. They are, in the first instance, the result of lust in men; but they can be communicated to innocent persons and to generations yet unborn. There are no trustworthy statistics concerning the prevalence of these diseases among persons who are apparently in health, such statistics as exist being generally founded on observation of persons not in health, such as hospital patients and the men and women who resort to out-patient departments and dispensaries, because they are in some way suffering. The dreadful military and naval statistics are trustworthy; but they relate to a class of men who live under unnatural and unfavorable conditions. It is certain, however, that the venereal diseases prevail in the community as a whole — sick and well — to a formidable degree, and that they frequently complicate other disorders. Recent discoveries have furnished valuable tests for the presence or absence of these diseases in the human body, and have also supplied the medical profession with means of probable cure, prompter and more effective than any previous generation of physicians has possessed. Moreover, various other diseases or disabilities to which the human body is liable, such as general paresis, locomotor ataxia, insanity, and blindness, have been traced to one or other of the venereal diseases, not as an exclusive cause, but as a common cause.

Under these new circumstances, the former neglect of these diseases and the former silence about them have become no longer justifiable. It is quite as much an object for the health authorities of a modern state to search out, register, and treat the cases of venereal disease, as to detect and treat, if need be at public expense, cases of scarlet fever, diphtheria, typhoid fever, or smallpox. The interest of the community in the segregation and treatment of venereal diseases is quite as strong as its interest in the effective treatment of any other of the communicable diseases; indeed, it is even stronger, because of the persistence and destructiveness of the venereal diseases and of their transmissibility to other generations.

An inevitable part of this subject is society's treatment of prostitution. Recent inquiries have demonstrated that more than half of the prostitutes in a modern city, or a rural community, are likely to be feeble-minded women. The effective confinement of feeble-minded women, at least till they are past child-bearing, is, therefore, an indispensable part of the restriction of prostitution and the limitation of venereal disease. Here is an important field of labor for all boards of health and particularly for every State board of health. The public mind and conscience need much enlightening and arousing on this subject. In order to obtain the best results, the coöperation of the family, the physician, the church, and the board of health is necessary. Within the past four years much valuable experience has been acquired concerning the police suppression of prostitution. It has been proved that an honest police force, under the direction of a right-minded commissioner or chief, can suppress public or semi-public brothels, and make it difficult for a casual inquirer to find a prostitute. It has been proved, moreover, that this suppression diminishes the accessibility and the amount of sexual vice, and therefore the profits of commercialized vice, much as alcoholism is diminished by the absence of saloons. Of course, under such circumstances this vice is more or less scattered, and driven to new resorts and devices; but there are also new methods by which the new shelters or channels for vice can be successfully attacked one after another as they develop, with such coöperation as large employing corporations, owners of hotels and apartment houses, the post-office and the telephone companies, and the numerous people who are interested in the protection of the neighborhoods in which they live can readily supply. In view of the facts brought out by commissions of inquiry and the police forces of large cities within the past four years, it is impossible longer to maintain that the suppression of public vice resorts does more harm than good. As to the toleration of licensed, faintly regulated quarters for vice, it has been abundantly proved in Europe, Asia, and America that there has never been either effective segregation or effective regulation, and that this ancient policy has no value whatever.

It is for the boards of health, in coöperation with the medical profession and the courts, to apply to these scourges the principles of preventive medicine. It is also highly desirable that philanthropic and religious efforts should take a new direction, and that such bodies should use all their forces to prevent boys and girls, or young men and young women, from falling into sin and wretchedness through ignorance. The right giving of the needed information to young people requires knowledge of the subject in parents, teachers, and the leaders of young people in churches, clubs, Christian Associations, and social gatherings. It is a work requiring delicacy and reserve, and good judgment concerning time, place and company; but it is indispensible work in which the medical profession and the boards of health ought to take active and serious part.

These two extreme evils — alcoholism and prostitution — are almost always found in close association. In defense of the community, boards of health, licensing boards, and the police need to deal with them, as a rule, in their natural conjunction. To disassociate them is to enfeeble both. The assistance of responsible real-property owners is highly desirable, and is often to be had. This conjunction of liquor-selling with vice, however, presents to city and town authorities one of the most difficult of their problems. Whatever success is gained in dealing with the evil of alcoholism — and some success has already been gained and more is in sight — will bear fruit at once in the diminution of sexual vice.

It is clear that total abstinence from alcoholic drinks is far the safest course for adolescents and young people; because alcohol, even in small quantities occasionally, is liable to diminish self-control under sudden temptation. The responsibility of physicians and boards of health in regard to the advice they give to young people on these matters is heavy indeed; and so is their responsibility on these subjects towards legislatures, municipal governments, courts, and State executives. The health authorities and the medical profession should join hands to procure adequate provision in general hospitals and dispensaries for the effective treatment of drunkenness and the venereal diseases, and should see to it that none but practitioners fully acquainted with the somewhat elaborate technique of the new treatment for those diseases should be allowed to administer that treatment.

The only other subject I can deal with within the proper limits of this paper is the function of boards of health as teaching forces, — a function to be exercised through public health officers, physicians and surgeons, trained nurses, dental nurses or hygienists, private societies, printed reports, posters, and circulars, and the public press. The ignorance of the American people concerning individual, family, and public hygiene is vast; and its consequences are deeply to be deplored. Until lately, boards of health gave their attention chiefly to fighting vivid evils which were obviously damaging the public health, just as the ordinary physician devoted himself to curing patients that were already sick. They labored to protect the community from foul waters, infected or spoilt foods, adulterated drugs, the spread of contagious diseases, and the effects of unwholesome trades. They have lately, like the physician, taken on some preventive functions; and the best of these functions is the giving of instruction and guidance to legislators, public officials, and the thoughtful portion of the population. Through the efforts of private societies and public bodies much instruction has been organized and is under way, as for example in the work of physicians and nurses as inspectors in schools and colleges, of the district nurses, of the new dental nurses or hygienists in schools and orphanages, of the social workers who follow to their homes persons treated at hospitals, out-patient departments and dispensaries, and of the volunteer physicians and paid nurses who teach mothers how to keep their babies well. Nurses or hygienists are doing the greater part of this eminently concrete and practical teaching; and good results already appear in the mortality statistics, and in the remarkable reductions in the number of cases of children's diseases effected in institutions for children which have been under observation during the last six or eight years. The success of work of these various kinds, already undertaken and in progress, is so considerable that a great extension of the work is emphatically called for. No public expenditure can be as rewarding as well-directed expenditure on the public health; because that is the expenditure which results most directly in the increase of both public efficiency and public happiness.

There is one kind of instruction, much needed by the American people, which would illustrate better than any other the desirable preventive functions of health officers and boards of health, namely, instruction concerning diet. The ignorance of the American people concerning the enjoyable, healthful and productive use of foods is profound; and this ignorance results in immense waste, reduced industrial efficiency, unnecessary ill-health, and shortened life. The ordinary American diet errs gravely in regard to both quantity and quality, — particularly in the amount of proteid habitually ingested. In the future the activities of boards of health and health officers should be directed constantly to the giving of universal instruction in the normal feeding of both children and adults, and in the nutrition values of the various materials which the markets supply, while not neglecting the protection of the community from unsafe articles of food. Again, a larger proportion of the American people than of any other people needs to be warned by health experts against the destructive effects of luxury and self-indulgence; because a larger proportion has the means of living soft, lazy, and unproductive lives. It is interesting to see how much public instruction about diet is now being given by European governments, in order to maintain the efficiency of the peoples under the stress of war. Americans need that sort of instruction all the time — in fat years and lean years, in good times and bad — and there is nobody to give it with authority except the medical profession and the public health officials.

Massachusetts set an excellent example concerning the teaching functions of boards of health when the Legislature in 1893 appointed a joint board on the improvement of Charles River, consisting of the recently created Metropolitan Park Commission and the State Board of Health. That act, with its invaluable results, emphasizes the obvious fact that boards of health should be vigorous teachers of sound principles concerning housing, open spaces in cities, parks, garden cities, and air and light in all dwellings, shops, and factories. These are all public health problems, and fields for the demonstration of the power of preventive medicine in promoting the public welfare.

TYPHOID FEVER AT THE GRAFTON STATE INSANE HOSPITAL.

THE following report of a recent typhoid outbreak in the Grafton State Insane Hospital is of interest: —

This institution consists of what was formerly called the Worcester Insane Hospital, Summer Street, Worcester, as well as four colonies situated in North Grafton.

In Worcester at the time of the outbreak there were 638 patients and 169 employees, while at North Grafton there were 831 patients and 200 employees, making a total of 1,838 for the entire institution.

On May 8, 1 positive typhoid reaction was obtained from Worcester and 2 from Grafton, and 1 each from both places on May 15. The Worcester cases were from two different female wards, fed from a common kitchen, and no cases or suspicious cases were found in the male wards or among the employees.

The 3 cases in North Grafton were from three different female wards, fed in three different dining rooms, served from a common kitchen. These three dining rooms and kitchen are in the Pine Service Building, where 330 patients and 40 nurses take their meals. Very little of the nurses' food is handled by the patients, as most of this is done by the cook and her assistant, while most of the patients' food is handled and served by the patients themselves. In all departments at North Grafton milk is freely served and used three times a day. No cases or suspicious cases were noted on the male ward or among the employees at North Grafton.

No history of recent illness, malaise or indisposition of any kind was obtained from those handling the milk or other food.

The milk supply of the institution was obtained from B. and from N. of North Grafton, as well as about 200 quarts daily produced on the two farms connected with the colony in North Grafton. All of the milk, however, was not mixed; none of N.'s milk went to North Grafton; none of the milk from Colony 1 went to Worcester; and none of B.'s milk was used in Grafton. The milk from the O. farm in North Grafton was the only portion of the supply used at both Grafton and Worcester. The milk was not bottled, but was delivered by B. in his own cans, which were handled, collected and washed by his men. The milk from N. is collected in cans furnished by the institution. These cans, as well as those used at the two farms in Grafton, are furnished by the institution and are washed with steam and warm water at Grafton, but not actually sterilized. Since the beginning of the outbreak, however, satisfactory additional precautions have been taken.

There was no history of typhoid or any other suspicious indisposition on the B. and N. supplies.

As soon as the first cases appeared, all suspected "contacts" were vaccinated, and later, all employees; and when it was suggested that every one in the institution be vaccinated, arrangements were made forthwith to carry out this suggestion at the rate of about 100 cases a day. To date (June 14) all employees at Grafton and Worcester have received their third treatment, and all patients, with a very few exceptions, have received their second, so that inside of ten days every one in the entire institution will have been vaccinated.

On May 18, 3 positive typhoid reactions were obtained, as follows: —

1. William H., milker at O. farm (the only milk supply common to both Grafton and Worcester). This man was examined and cross-examined for history of typhoid or anything suggesting it, but declared he had never been sick in his life, with the exception of a slight cold about a month ago. He has been employed here a little over a month, previous to which time he worked for the Draper Manufacturing Company, Hopedale, for several years, and for seven years at the General Electric Company, Lynn.

2. Mary W., a patient who had been at the institution for several years, but with nothing suggestive of typhoid in her past record or history. This patient handles the food in the kitchen at the Pine Service Building, North Grafton, where the first three cases were reported.

3. Bridget M., who handles food in the same kitchen. The hospital records show that she had typhoid here in September, 1905.

These 2 patients were excluded from the food department and kept under observation, and William H. was excluded from the milk department and kept under observation, and no new patients were detailed for kitchen or milk work unless presenting a negative typhoid test.

The kitchen, dining rooms, barns, dairies, etc., were thoroughly inspected and found to be in satisfactory condition.

At Worcester, city water is used, while at Grafton the supply is from driven wells. The sewage at Worcester is taken care of by the city sewer, while at the Grafton Colony it is disposed of by a series of filter-beds.

Aside from 1 case, May 8, and 1 case, May 15, at Worcester, which cannot be connected with the Grafton cases, no additional or suspicious cases have been noted, although several typhoid tests have been made with negative results.

The following table shows occurrence: —

	Number of Cases.
May 8,	1
May 15,	1
May 17,	5
May 19,	7
May 24,	7
Total,	21

In addition to these 21 cases with positive typhoid reactions, there were 3 cases with persistently negative reactions that were, clinically, apparently typhoid. Two specimens each of urine and bowel discharges from the 3 employees with positive tests were examined, and William H. and Mary W. were negative.

Typhoid bacilli were demonstrated in the bowel discharges of Bridget M. independently by the State laboratory and the Worcester board of health laboratory.

As stated above, the hospital records show that Bridget M. had typhoid in September, 1905. She has not constantly worked in the kitchen during these ten years, but only from time to time.

THE CAMPAIGN AGAINST CANCER IN NEW ENGLAND.

THE New England States generally show a higher death rate from cancer than any other group of States. This does not mean that New England people are more susceptible to this disease. Cancer is a disease of later adult life, and it is well known that in parts of New England there are more old people proportionately to the population than in many other regions. Nevertheless, the death rates recently published by the United States Census Bureau have stimulated much activity in these States in the educational campaign for the control of malignant disease.

What are the facts upon which this movement is based? According to the report of the Census Bureau, in 1913 there were 49,928 deaths from cancer in the registration area of the United States, corresponding to a death rate of 78.9 per 100,000 of the population. All the New England States have individual cancer death rates much higher than this. Connecticut's rate, which was the lowest of any of the New England States, was 85.1. Vermont's rate was the highest, with 111.7, while the rates of the other States were correspondingly high, Maine having a rate of 107.5,. New Hampshire, 104.4, Massachusetts, 101.4, and Rhode Island, 93.3. When these figures are compared with those of Kentucky, with a rate of 48, they seem indeed very high. They mean that 6,817 people died in 1913 in New England from cancer. But it does not necessarily follow that cancer is more common in New England than elsewhere. The Census Bureau attributes the high cancer death rates in certain districts to the relatively high age distribution of the population and the negligible amount of immigration. Translated into every-day terms this means that in New England the proportion of people over forty years of age, or at the cancer age, to those under forty, and so less liable to cancer, is greater than in other places. Yet there is no doubt that the cancer death rate in New England, as well as in other parts of the country, is much higher than it ought to be. Without question a large percentage of cancer deaths can be prevented by early recognition of the symptoms and prompt recourse to competent surgical advice and treatment. Cancer is not a hopeless incurable affection, as so many people wrongly believe. Those who know the facts believe that if the public can be properly educated in regard to the early signs of the disease, and will act on this knowledge, the present mortality should be reduced at least half and perhaps two-thirds.

The State Health Department has in preparation a bulletin on cancer, its early recognition, and what to do when suspicions are aroused that the disease has begun to manifest itself. This bulletin will gladly be sent to all who will write to the Department for it.

FOOD AND DRUGS.

The following tables present the results of the laboratory examinations of samples of food and drugs collected during the month of May, 1915: —

The cities and towns in which samples were collected were: Arlington, Boston, Brookline, Cambridge, Canton, Chelsea, Chicopee, Dedham, Dracut, Easthampton, Everett, Gloucester, Hingham, Lawrence, Lexington, Lowell, Ludlow, Malden, Manchester, Medford, Melrose, Methuen, New Bedford, Newbury, Newburyport, Newton, North Adams, Northampton, Pittsfield, Quincy, Reading, Revere, Salem, Saugus, Somerville, Spencer, Springfield, Tewksbury, Walpole, Watertown, Wellesley, Wenham, West Springfield, Westfield, Weymouth, Whitman, Winchester, Winthrop and Woburn.

SUMMARY OF ANALYSES.

ARTICLES EXAMINED.	Number found to be of Good Quality.	Number adulterated or varying from the Legal Standard.	Total.
Baking powder,	3	–	3
Butter,	2	1	3
Cocoa,	1	–	1
Condimental sauce,	1	–	1
Cream,	19	1	20
Cream of tartar,	3	–	3
Drugs,	117	7	124
Flavoring extracts: —			
Peppermint,	1	–	1
Vanilla,	5	8	13
Honey,	1	–	1
Ice cream,	15	1	16
Jams and jellies,	5	3	8
Lard,	–	1	1
Maple sugar,	6	1	7
Maple syrup,	1	–	1
Meat products: —			
Chickens,[1]	–	9	9
Fowl,[1]	–	1	1
Goose,[1]	–	2	2
Hamburg steak,	2	–	2
Pork trimmings,[1]	12	7	19
Sausages,	5	1	6
Veal,	1	–	1
Milk,	675	208	883
Molasses,	1	–	1
Olive oil,	5	–	5
Pickles,	1	–	1
Spices,	5	–	5
Totals,	887	251	1,138

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[1] Taken from cold storage.

PROSECUTIONS FOR VIOLATIONS OF THE LAWS RELATING TO FOOD AND DRUGS.

Fourteen convictions were secured during the month of May, 1915, for the sale of adulterated food, and for violation of the cold-storage and slaughtering laws, as follows: —

NAME OF DEFENDANT.	Place.	Character of Article sold or Nature of Offence.
Ivory E. Day,	Lanesville,	Milk (total solids, 11.90).[1], [2]
H. P. Hood & Sons,	Boston,	Milk (total solids, 11.80).[2]
H. P. Hood & Sons,	Boston,	Milk (total solids, 11.80).[2]
Harry D. Nichols,	Richmond,	Milk (total solids, 11.36).
Albert A. Rice,	Framingham,	Milk (total solids, 12.64).[1]
Charles Sughrue,	Carlisle,	Milk (total solids, 10.34).[3]
Roscoe Sullivan,	Springfield,	Milk (total solids, 11.52).[3]
Leon J. Yerkes,	Richmond,	Milk (total solids, 11.32).
Arthur Greenwood,	Lowell,	Sausages (contained starch in excess of 2 per cent.).
Isiae Roussell,	Dracut,	Sausages (contained starch in excess of 2 per cent.).
Thomas Soracco,	Boston,	Unlawfully returning goods to cold storage.
Howard Chandler,	Abington,	Selling uninspected and unstamped meat.
R. L. Edwards,	Abington,	Selling uninspected and unstamped meat.
Edward J. Murphy,	Taunton,	Slaughtering without inspector present.

[1] Skimmed. [2] Appealed. [3] Watered.

Fines imposed, $425.

ARTICLES IN COLD STORAGE CONDEMNED UPON PHYSICAL AND CHEMICAL EXAMINATIONS AS UNFIT FOR FOOD.

Date.	ARTICLES.	Weight (Pounds).	Reasons.	Disposition.
May 5, 1915	Mackerel,	130	Soiled and dried,	Rendered.
May 5, 1915	Mackerel,	1,950	Soiled and dried,	Rendered.
May 7, 1915	Mutton,	41	Soiled and dried,	Incinerated.
May 7, 1915	Beef livers,	53	Sour,	Rendered.
May 10, 1915	Veal,	63	Soiled and dried,	Incinerated.
May 12, 1915	Venison,	127	Decomposed,	Rendered.
May 12, 1915	Chickens,	211	Decomposed,	Rendered.
May 12, 1915	Chickens,	160	Decomposed,	Rendered.
May 12, 1915	Fowl,	48	Decomposed,	Rendered.
May 12, 1915	Breasts of chickens,	70	Decomposed,	Rendered.
May 12, 1915	Rabbits,	47	Tainted,	Rendered.
May 19, 1915	Pork trimmings,	605	Decomposed,	Rendered.
May 19, 1915	Pork trimmings,	1,471	Decomposed,	Rendered.
May 19, 1915	Chickens,	153	Decomposed,	Rendered.
May 20, 1915	Lobster meat,	25	Rancid,	Rendered.
May 20, 1915	Beef loin,	28	Dried and soiled,	Rendered.
May 20, 1915	Venison,	30	Decomposed,	Rendered.
May 20, 1915	Lamb racks,	23	Rancid, dried and soiled,	Rendered.
May 21, 1915	Beef hocks,	41	Soiled and dried,	Rendered.
May 21, 1915	Chickens,	37	Soiled and dried,	Rendered.
May 21, 1915	Chickens,	615	Decomposed,	Rendered.
May 21, 1915	Salmon,	12	Soiled and dried,	Rendered.
May 21, 1915	Venison,	28	Decomposed,	Rendered.
May 21, 1915	Ox tails,	14	Decomposed,	Rendered.
Total,		5,982		

SAMPLES OF FOOD WHICH UPON EXAMINATION WERE FOUND TO BE ADULTERATED.

FRANKFORTS.

Contained Starch in Excess of 2 Per Cent.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
1978-A	Max Wiedemann, Roxbury.	

ICE CREAM.

Low in Fat.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
1153-T	Isaac M. Merrithew, Saugus.	

JAMS AND JELLIES.

Contained Sulphites.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
861-T	Austin Brothers, Westfield, ...	Imperial Pie Fruit., H. C. Gutchess, Port Bryon, N. Y.

Contained Benzoic Acid.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
27370	Houghton & Dutton Company, Boston, . . .	Atwood's Raspberry Jam, Atwood Preserving Company, Cambridge.
27321	Sally Lunn, Boston, ...	Strawberry Jam.

LARD.

Compound; not properly marked.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
q 16215	Israil Miller, Boston.	

MAPLE SUGAR.

Contained Cane Sugar.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
653-T	Mary Corsiglio, North Adams.	

VANILLA EXTRACT.

Formula incorrect.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
26431	M. Bee Grocery, Boston, ...	Red Seal, Colman Specialty Company, Boston.
26299	I. Fishman, Brockton, ...	Acme, W. J. Leonard, Brockton.
26518	Hatton Bros. & Johnson, Lynn, ...	Holbrook's.
26512	Manhattan Market, Cambridge, ...	Red Border, Red Border Brand Company, Cambridge.
1164-A	A. Shapiro, Dorchester, ...	Crompton's, Charles Crompton & Sons, Lynn.
26920	J. J. Walsh, Lawrence, ...	Gowing's, Gowing Extract Company, North Reading, Mass.
26695	I. Wolfson, New Bedford, ...	Crompton's, Charles Crompton & Sons, Lynn.

SAMPLES OF FOOD WHICH UPON EXAMINATION WERE FOUND TO BE ADULTERATED — *Concluded.*

Per Cent. of Ingredients not stated on Label.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
q 15120	Market, Middlesex Street, Lowell,	Austin Nichols & Co., New York.
	Label False; a Solution of Artificial Vanillin.	
26436	Saunder's Market, Lowell,	Standard, Reliable Specialty Company, Malden.
26445	Variety Store, 71 Thorndike Street, Lowell,	Silver King, D. Lawrence Shaw, New York.
27124	Grocery Store, 89 Park Street, Attleboro,	Bell Bros., Bell Bros. Specialty Company, Boston.

SAMPLES OF DRUGS WHICH UPON EXAMINATION WERE FOUND TO BE ADULTERATED.

SPIRIT OF ANISE.

Number of Sample.	DEALER.	Per Cent. of Required Strength.
1920–A	Gorshel's Pharmacy, Chelsea,	79
27406	F. Jaynes, Boston,	42
	SPIRIT OF CAMPHOR.	
1968–A	Cottage Drug Company, Roxbury,	81
1786–A	James S. Halloran, South Boston,	84
	SPIRIT OF NITRE.	
q 16214	E. De Leo, Boston,	59
q 16057	A. L. Green, Boston,	79.5
q 16015	The Willow Pharmacy, Somerville,	29

SAMPLES OF MILK WHICH UPON EXAMINATION WERE FOUND TO BE ADULTERATED.

Number of Sample.	Name of Dealer, Wholesaler or Producer.	Results of Analyses.
q 16193	J. L. Card, Wellesley,	Total solids, 10.48 per cent.; fat, 3.10 per cent.; contained added water.
27414	Frank Dostaler, Lowell,	Total solids, 10.06 per cent.; fat, 1.10 per cent.; proteins, 3.39 per cent.; skimmed milk.
q 16036	D. C. Freeman, Whitman,	Total solids, 12.08 per cent.; fat, 3.05 per cent.; proteins, 3.38 per cent.; skimmed milk.

SAMPLES OF MILK WHICH UPON EXAMINATION WERE FOUND TO BE ADULTERATED — *Concluded.*

Number of Sample.	Name of Dealer, Wholesaler or Producer.	Results of Analyses.
1133-T	George E. Harris, Weymouth,	Total solids, 11.68 per cent.; fat, 2.80 per cent.; proteins, 3.36 per cent.; skimmed milk.
1037-T	Emma M. Howard, Melrose,	Total solids, 10.90 per cent.; fat, 3.40 per cent.; contained added water.
1039-T	Emma M. Howard, Melrose,	Total solids, 11.46 per cent.; fat, 3.60 per cent.; contained added water.
1199-T	Miles P. Keene, North Weymouth,	Total solids, 11.30 per cent.; fat, 3.80 per cent.; contained added water.
1201-T	Miles P. Keene, North Weymouth,	Total solids, 11.76 per cent.; fat, 4 per cent.; contained added water.
1203-T	Miles P. Keene, North Weymouth,	Total solids, 11.96 per cent.; fat, 4 per cent.; contained added water.
1205-T	Miles P. Keene, North Weymouth,	Total solids, 11.96 per cent.; fat, 4 per cent.; contained added water.
1207-T	Miles P. Keene, North Weymouth,	Total solids, 11.86 per cent.; fat, 4 per cent.; contained added water.
1209-T	Miles P. Keene, North Weymouth,	Total solids, 11.68 per cent.; fat, 3.80 per cent.; contained added water.
1211-T	Miles P. Keene, North Weymouth,	Total solids, 11.68 per cent.; fat, 3.85 per cent.; contained added water.
1213-T	Miles P. Keene, North Weymouth,	Total solids, 11.66 per cent.; fat, 3.50 per cent.; contained added water.
1215-T	Miles P. Keene, North Weymouth,	Total solids, 11.60 per cent.; fat, 3.40 per cent.; contained added water.
1217-T	Miles P. Keene, North Weymouth,	Total solids, 11.46 per cent.; fat, 3.25 per cent.; contained added water.
1069-T	Charles Meuse, East Weymouth,	Total solids, 11.20 per cent.; fat, 3.50 per cent.; contained added water.
1079-T	Thomas Morris, East Weymouth,	Total solids, 11.34 per cent.; fat, 2.30 per cent.; proteins, 3.16 per cent.; skimmed milk.
781-T	Henry Nickerson, Cohasset,	Total solids, 11.56 per cent.; fat, 2.40 per cent.; proteins, 3.16 per cent.; skimmed milk.
783-T	Henry Nickerson, Cohasset,	Total solids, 11.50 per cent.; fat, 2.60 per cent.; proteins, 3.11 per cent.; skimmed milk.
27420	Thomas F. Riley, Tewksbury,	Total solids, 9.64 per cent.; fat, 3 per cent.; contained added water.
27421	Thomas F. Riley, Tewksbury,	Total solids, 10.16 per cent.; fat, 2.90 per cent.; contained added water.
723-T	Joseph St. John, Cohasset,	Total solids, 11.56 per cent.; fat, 2.25 per cent.; proteins, 3.38 per cent.; skimmed milk.
735-T	O. J. Teot, Lanesborough,	Total solids, 12.20 per cent.; fat, 2.75 per cent.; proteins, 3.19 per cent.; skimmed milk.
1131-T	Olive W. Trainer, Weymouth,	Total solids, 10.10 per cent.; fat, 1.60 per cent.; proteins, 3.03 per cent.; skimmed milk.
q 16239	George D. Ware, Wellesley Hills,	Total solids, 12.28 per cent.; fat, 4.60 per cent.; contained added water.
q 16240	George D. Ware, Wellesley Hills,	Total solids, 12.36 per cent.; fat, 4.80 per cent.; contained added water.
q 16241	George D. Ware, Wellesley Hills,	Total solids, 12.26 per cent.; fat, 4.80 per cent.; contained added water.
q 16242	George D. Ware, Wellesley Hills,	Total solids, 12.30 per cent.; fat, 4.60 per cent.; contained added water.
q 16243	George D. Ware, Wellesley Hills,	Total solids, 12.24 per cent.; fat, 4.70 per cent.; contained added water.
q 16244	George D. Ware, Wellesley Hills,	Total solids, 12.36 per cent.; fat, 4.70 per cent.; contained added water.
q 16245	George D. Ware, Wellesley Hills,	Total solids, 12.32 per cent.; fat, 4.60 per cent.; contained added water.
q 16246	George D. Ware, Wellesley Hills,	Total solids, 10.92 per cent.; fat, 3.30 per cent.; contained added water.
q 16247	George D. Ware, Wellesley Hills,	Total solids, 10.86 per cent.; fat, 3.20 per cent.; contained added water.

CORRECTION.

In the Public Health Bulletin for March, 1915 (page 63), the name of J. R. Bigelow, Blackstone, was inserted through an error. Mr. Bigelow did not own the store at the time the sample was taken.

REPORT UPON THE WORK OF THE BACTERIOLOGICAL LABORATORY FOR THE MONTH OF MAY, 1915.

The following gives the total number of biological products and diagnostic outfits distributed by the bacteriological laboratory of the State Department of Health during the month of May, 1915: —

Biological Products.

Diphtheria antitoxin: —	
4,000 units (special for the Boston City Hospital),	1,764 bottles.
3,000 units,	3,244 bottles.
1,500 units,	589 bottles.
750 units,	402 bottles.
Smallpox vaccine,	8,865 tubes.
Typhoid vaccine,	4,722 ampoules.
Antimeningitis serum,	78 bottles.
Silver nitrate solution,	294 droppers.

Diagnostic Outfits.

Culture tubes,	570
Media,	12
Sputum bottles,	324
Widal outfits,	240
Bile outfits,	6
Malaria outfits,	3

The following gives the total number of bacteriological examinations made in the laboratory of the State Department of Health during the month of May, 1915: —

	Number of Examinations.	Diagnosis.		Release.	
		Positive.	Negative.	Positive.	Negative.
Diphtheria,	532	72	231	50	179

	Number of Examinations.	Positive.	Negative.	*Atypical.
Tuberculosis,	261	66	195	
*Typhoid fever (Widal test),	135	25	99	11
Typhoid fever (culture test),	16	1	15	
*Paratyphoid fever,	2	–	2	–
Malaria,	4	–	4	
Miscellaneous,	97			

Total number of examinations made, 1,047.

RETURNS OF DISEASES.

Cases of Diseases declared by the State Department of Health to be Dangerous to the Public Health.

[Under the provisions of section 52 of chapter 75 of the Revised Laws.]

DISEASE.	Week ending —					
	May 1.	May 8.	May 15.	May 22.	May 29.	Total.
Anterior poliomyelitis,	3	1	2	–	2	8
Cerebro-spinal meningitis,	1	10	2	3	4	20
Chicken pox,	83	120	79	105	77	464
Diphtheria,	172	161	165	137	146	781
Dog bite (requiring anti-rabic treatment),	2	–	3	2	10	17
Dysentery,	–	–	1	2	–	3
German measles,	32	35	23	22	32	144
Infectious diseases of the eye: —						
(*a*) Ophthalmia neonatorum,	57	62	61	70	60	310
(*b*) Suppurative conjunctivitis,	9	10	6	7	12	44
(*c*) Trachoma,	2	–	–	4	3	9
Malaria,	2	–	1	5	1	9
Measles,	1,058	835	1,082	857	979	4,809
Mumps,	89	67	54	57	68	335
Pellagra,	–	2	–	–	–	2
Scarlet fever,	230	211	226	282	284	1,233
Septic sore throat,	221	59	193	86	12	571
Smallpox,	–	–	1	2	2	5
Tuberculosis, pulmonary (or not classified),	194	225	199	167	194	979
Tuberculosis, other forms,	12	13	14	23	1	63
Tuberculous meningitis,	4	4	2	2	2	14
Typhoid fever,	19	23	35	39	31	147
Whooping cough,	132	149	118	117	169	685

RETURNS OF DEATHS.

Deaths from Diseases declared by the State Department of Health to be Dangerous to the Public Health.

Disease.	Week ending — May 1.	May 8.	May 15.	May 22.	May 29.	Total.
Cerebro-spinal meningitis,	2	4	3	–	3	12
Chicken pox,	1	1	–	–	–	2
Diphtheria,	11	10	12	10	16	59
German measles,	–	1	–	–	–	1
Measles,	4	5	3	4	4	20
Pellagra,	–	1	–	–	–	1
Scarlet fever,	2	6	9	8	9	34
Septic sore throat,	4	2	1	3	–	10
Tetanus,	1	–	–	–	1	2
Tuberculosis, pulmonary (or not classified),	67	76	65	55	66	329
Tuberculosis, other forms,	12	14	15	14	8	63
Typhoid fever,	1	2	–	4	5	12
Whooping cough,	7	1	3	7	2	20
Suppurative conjunctivitis,	–	1	–	–	–	1
Hookworm,	1	–	–	–	–	1
Anterior poliomyelitis,	1	–	–	–	–	1
Dysentery,	–	–	–	–	1	1
Smallpox,	–	–	–	–	1	1

RETURNS OF DEATHS.

WEEKLY RETURNS OF DEATHS FROM DISEASES DECLARED BY THE STATE DEPARTMENT OF HEALTH TO BE DANGEROUS TO THE PUBLIC HEALTH IN CITIES AND TOWNS IN MASSACHUSETTS.

[Under the provisions of chapter 210, Acts of 1913.]

In all cases where the name of a community is not mentioned it signifies that no deaths from these diseases have been reported to this office for the period covered by the table.

Week ending May 1, 1915.

CITIES AND TOWNS.	Population. Census for 1910.	Diphtheria.	Measles.	Scarlet Fever.	Tuberculosis, Pulmonary (or not classified).	Tuberculosis, Other Forms.	Typhoid Fever.	Whooping Cough.
Boston,	686,092	5	1	–	17	3	–	2
Worcester,	145,986	–	–	–	4	2	–	1
Fall River,	119,295	–	–	–	4	–	–	–
Lowell,	106,294	–	–	–	1	–	1	–
Cambridge,	104,839	2	–	–	2	1	–	–
New Bedford,	96,652	1	1	–	2	1	–	–
Lynn,	89,336	–	–	–	2	–	–	–
Springfield,	88,926	–	–	–	2	–	–	–
Lawrence,	85,892	–	–	–	1	–	–	2
Holyoke,	57,730	–	–	–	4	–	–	–
Brockton,	56,878	–	–	–	–	1	–	–
Haverhill,	44,115	–	1	–	1	–	–	–
Newton,	39,806	1	–	–	–	–	–	–
Fitchburg,	37,826	–	–	–	1	–	–	–
Taunton,	34,259	–	–	–	1	–	–	1
Everett,	33,484	–	–	–	1	–	–	–
Waltham,	27,834	–	–	–	1	–	–	–
Chicopee,	25,401	–	–	–	1	–	–	–
Gloucester,	24,398	–	–	–	1	–	–	–

Medford,	23,150	–	–	1	1	–	–	–
Northampton,	19,431	–	–	–	1	–	–	–
Beverly,	18,650	–	–	–	–	1	–	–
Leominster,	17,580	–	–	–	1	–	–	–
Newburyport,	14,949	–	–	–	–	1	–	–
Adams,	13,026	–	–	–	1	–	–	–
Weymouth,	12,895	–	–	–	2	–	–	–
Webster,	11,509	–	–	–	1	–	–	–
Methuen,	11,448	–	–	–	1	–	–	–
Braintree,	8,066	–	1	–	–	–	–	–
Norwood,	8,014	–	–	–	1	–	–	–
Bridgewater,	7,688	–	–	–	–	1	–	–
Winchendon,	5,678	–	–	–	1	1	–	1
Belmont,	5,542	–	–	–	1	–	–	–
Randolph,	4,301	–	–	–	1	–	–	–
Rockport,	4,211	–	–	–	1	–	–	–
Foxborough,	3,863	1	–	–	–	–	–	–
East Bridgewater,	3,363	–	–	–	2	–	–	–
Norton,	2,544	1	–	–	–	–	–	–
Clarksburgh,	1,207	–	–	–	1	–	–	–
Lakeville,	1,141	–	–	–	3	–	–	–
Becket,	959	–	–	–	1	–	–	–
Halifax,	550	–	–	–	1	–	–	–
Alford,	275	–	–	1	–	–	–	–
Totals,	–	11	4	2	67	12	1	7

In addition to the above, 1 death occurred from cerebro-spinal meningitis in Boston and 1 in Fitchburg, 1 death from chicken pox in Boston, 3 deaths from septic sore throat in Boston and 1 in Brockton, 1 death of a nonresident in Boston from tetanus, 1 death from hookworm disease in Arlington and 1 death from infantile paralysis in Lynn.

Week ending May 8, 1915.

CITIES AND TOWNS.	Population. Census for 1910.	Diphtheria.	Measles.	Scarlet Fever.	Tuberculosis, Pulmonary (or not classified).	Tuberculosis, Other Forms.	Typhoid Fever.	Whooping Cough.
Boston,	686,092	6[1]	–	3	18[1]	4	–	1
Worcester,	145,986	1	–	–	4	3	–	–
Fall River,	119,295	1	–	–	10	–	–	–
Lowell,	106,294	1	–	–	–	–	–	–
Cambridge,	104,839	1	–	–	4	1	–	–
New Bedford,	96,652	–	1	–	2	–	1	–
Lynn,	89,336	–	–	–	1	–	–	–
Springfield,	88,926	–	–	–	3	–	–	–
Lawrence,	85,892	–	–	–	3	1	–	–
Somerville,	77,236	–	–	–	4	–	–	–
Holyoke,	57,730	–	–	–	4	–	1	–
Brockton,	56,878	–	–	–	1	1	–	–
Haverhill,	44,115	–	–	–	1	–	–	–
Newton,	39,806	–	–	–	1	–	–	–
Taunton,	34,259	–	–	1	1	–	–	–
Everett,	33,484	–	1	–	1	–	–	–
Pittsfield,	32,121	–	–	–	1	–	–	–
Brookline,	27,792	–	–	–	1	–	–	–
Chicopee,	25,401	–	–	–	2	–	–	–
Medford,	23,150	–	–	1	1	2	–	–
Northampton,	19,431	–	–	–	1	–	–	–
Attleboro,	16,215	–	–	–	1	–	–	–
Peabody,	15,721	–	1	–	–	–	–	–
Melrose,	15,715	–	1	–	–	–	–	–
Woburn,	15,308	–	–	–	1	–	–	–
Framingham,	12,948	–	–	1	1	–	–	–
North Attleborough,	9,562	–	–	–	1	–	–	–

Danvers,	9,407	–	–	–	1	–	–	–
West Springfield,	9,224	–	–	–	1	–	–	–
Palmer,	8,610	–	1	–	–	–	–	–
Bridgewater,	7,688	–	–	–	1	–	–	–
Whitman,	7,292	–	–	–	–	1	–	–
Blackstone,	5,648	–	–	–	1	–	–	–
North Andover,	5,529	–	–	–	–	1	–	–
Barnstable,	4,676	–	–	–	1	–	–	–
East Bridgewater,	3,363	–	–	–	1	–	–	–
North Brookfield,	3,075	–	–	–	1	–	–	–
Douglas,	2,152	–	–	–	1	–	–	–
West Bridgewater,	2,231	–	1	–	–	–	–	–
Totals,	-	10	6	6	76	14	2	1

In addition to the above, the following deaths were also reported: cerebro-spinal meningitis, Boston 1, Worcester 1, Lawrence 1, Winchendon 1; septic sore throat, Boston 1; suppurative conjunctivitis, Hull 1; pellagra, Boston 1; chicken pox, Winchendon 1.

[1] Two nonresidents.

Week ending May 15, 1915.

CITIES AND TOWNS.	Population. Census for 1910.	Diphtheria.	Measles.	Scarlet Fever.	Tuberculosis, Pulmonary (or not classified).	Tuberculosis, Other Forms.	Typhoid Fever.	Whooping Cough.
Boston,	686,092	5[1]	1	8[2]	24[1]	5	–	–
Worcester,	145,986	–	–	–	2	2	–	–
Fall River,	119,295	1	–	–	–	–	–	2
Lowell,	106,294	–	–	–	4	–	–	–
Cambridge,	104,839	1	1	–	5	–	–	–
New Bedford,	96,652	–	–	–	3	1	–	–
Lynn,	89,336	1	–	–	2	–	–	–
Springfield,	88,926	–	–	–	4	–	–	–
Lawrence,	85,892	–	–	–	3	–	–	–
Somerville,	77,236	1	–	–	–	–	–	–
Holyoke,	57,730	–	–	–	1	1	–	–
Malden,	44,404	–	–	–	1	–	–	–
Haverhill,	44,115	–	–	–	1	–	–	–
Newton,	39,806	–	–	–	1	–	–	–
Fitchburg,	37,826	–	–	–	1	1	–	–
Taunton,	34,259	–	–	–	2	1	–	–
Everett,	33,484	2	–	–	1	–	–	–
Waltham,	27,834	–	–	–	1	2	–	–
North Adams,	22,019	–	–	–	1	–	–	–
Beverly,	18,650	–	–	–	1	–	–	–
Attleboro,	16,215	–	–	–	1	–	–	–
Peabody,	15,721	–	1	–	1	–	–	–
Melrose,	15,715	–	–	–	2	–	–	–
Gardner,	14,699	–	–	–	1	–	–	–
Framingham,	12,948	–	–	1	–	–	–	–
Southbridge,	12,592	1	–	–	–	–	–	–
Methuen,	11,448	–	–	–	–	–	–	1
Franklin,	5,641	–	–	–	1	–	–	–
Needham,	5,026	–	–	–	–	1	–	–
Somerset,	2,798	–	–	–	–	1	–	–
Marshfield,	1,738	–	–	–	1	–	–	–
Totals,	–	12	3	9	65	15	–	3

In addition to the above, the following deaths were also reported: cerebro-spinal meningitis, Medford 1, Peabody 1, Needham 1; septic sore throat, Boston 1.

[1] Two nonresidents.

[2] Four nonresidents.

Week ending May 22, 1915.

Boston,	686,092	7[1]	1	5[2]	23	5[1]	–	2
Worcester,	145,986	–	–	–	4	–	1	–
Fall River,	119,295	–	–	–	3	–	–	–
Lowell,	106,294	1	–	–	2	–	1	1
New Bedford,	96,652	–	–	–	1	–	–	–
Lynn,	89,336	–	–	–	2	1	–	–
Springfield,	88,926	1	1	–	1	–	–	1
Lawrence,	85,892	–	–	1	1	–	–	2
Somerville,	77,236	–	–	–	2	1	–	–
Brockton,	56,878	–	–	–	1	–	–	–
Malden,	44,404	–	–	1	–	–	–	–
Haverhill,	44,115	1	–	–	–	–	–	–
Salem,	43,697	–	–	–	1	–	–	–
Newton,	39,806	–	–	–	–	1	–	–
Everett,	33,484	–	–	–	1	–	–	–
Chelsea,	32,452	–	–	–	1	–	–	–
Pittsfield,	32,121	–	–	–	1	–	–	–
Waltham,	27,834	–	–	–	1	–	–	–
Chicopee,	25,401	–	–	–	1	–	–	–
Attleboro,	16,215	–	–	–	1	–	1	–
Westfield,	16,044	–	–	–	–	1	–	–
Peabody,	15,721	–	–	–	–	1	–	–
Melrose,	15,715	–	–	–	1	1	–	–
Clinton,	13,075	–	–	–	–	1	–	–
Arlington,	11,187	–	–	–	2	–	–	–
Winchester,	9,309	–	–	–	1	–	–	–
Athol,	8,536	–	–	–	–	1	–	–
Fairhaven,	5,122	–	2	–	–	–	–	–
Needham,	5,026	–	–	–	1	–	–	–
Rockport,	4,211	–	–	–	–	1	–	–
North Brookfield,	3,075	–	–	–	–	–	–	1
Nantucket,	2,962	–	–	–	–	–	1	–
Westport,	2,928	–	–	1	–	–	–	–
Avon,	2,013	–	–	–	1	–	–	–
Lakeville,	1,141	–	–	–	2	–	–	–
Totals,	–	10	4	8	55	14	4	7

In addition to the above, the following deaths were also reported: septic sore throat, Boston 2, Worcester 1.

[1] Two nonresidents.

[2] One nonresident.

Week ending May 29, 1915.

CITIES AND TOWNS.	Population. Census for 1910.	Diphtheria.	Measles.	Scarlet Fever.	Tuberculosis, Pulmonary (or not classified).	Tuberculosis, Other Forms.	Typhoid Fever.	Whooping Cough.
Boston,	686,092	9	2[1]	2	22[2]	2	-	2
Worcester,	145,986	1	-	-	2	1	-	-
Fall River,	119,295	-	-	-	3	-	-	-
Lowell,	106,294	-	-	-	1	-	-	-
Cambridge,	104,839	1	-	-	4	-	-	-
New Bedford,	96,652	-	-	-	4	2	-	-
Lynn,	89,336	-	-	-	2	1	-	-
Springfield,	88,926	-	-	-	1	-	-	-
Lawrence,	85,892	2	-	1	3	-	-	-
Somerville,	77,236	1	-	1	-	1	1	-
Holyoke,	57,730	-	-	-	2	1	-	-
Malden,	44,404	1	-	2	-	-	-	-
Haverhill,	44,115	-	-	-	1	-	1	-
Newton,	39,806	-	-	-	1	-	-	-
Fitchburg,	37,826	-	-	1	2	-	-	-
Taunton,	34,259	-	-	-	2	-	-	-
Everett,	33,484	-	-	-	1	-	-	-
Waltham,	27,834	-	-	-	2	-	-	-
Brookline,	27,792	-	-	-	1	-	-	-
Chicopee,	25,401	-	-	-	2	-	-	-
North Adams,	22,019	-	-	-	1	-	-	-
Westfield,	16,044	-	-	-	1[2]	-	-	-
Melrose,	15,715	-	-	1	-	-	-	-
Woburn,	15,308	-	-	-	1	-	-	-
Newburyport,	14,949	-	-	-	1	-	-	-
North Attleborough,	9,562	1	-	-	-	-	-	-
West Springfield,	9,224	-	-	1	-	-	-	-

Middleborough,	8,214	–	–	–	1	–	–	–
Fairhaven,	5,122	–	1	–	–	–	2	–
Lexington,	4,918	–	–	–	1	–	–	–
Ashburnham,	2,107	–	1	–	–	–	–	–
Lakeville,	1,141	–	–	–	2	–	–	–
North Reading,	1,059	–	–	–	2	–	–	–
Totals,	–	16	4	9	66	8	4	2

In addition to the above, the following deaths were reported: cerebro-spinal meningitis, Springfield 1, Lawrence 1, Peabody 1; tetanus, Brockton 1; smallpox, New Bedford, 1; dysentery, Lynn 1.

[1] Two nonresidents.

[2] One nonresident.

MASSACHUSETTS STATE DEPARTMENT OF HEALTH.

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PUBLIC HEALTH BULLETIN

ISSUED MONTHLY

BY THE

STATE DEPARTMENT OF HEALTH

OF MASSACHUSETTS

JULY, 1915

Vol. 2, No. 6

ALLAN J. McLAUGHLIN, M.D., *Commissioner*

"THE COMMON HEALTH OF THE COMMONWEALTH"

Entered as Second-class Matter Oct. 26, 1914, at the Post Office at Boston, Mass.,
under the Act of Aug. 24, 1912

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Approved by
The State Board of Publication.

MASSACHUSETTS STATE WASSERMANN LABORATORY.

ON June 1, 1915, the following circular letter was sent to each of the institutions under the control of the State Board of Charity, the State Board of Insanity and the State Board of Prison Commissioners, also to each of the district health officers, announcing the opening of the State Wassermann Laboratory: —

THE COMMONWEALTH OF MASSACHUSETTS.
STATE DEPARTMENT OF HEALTH, WASSERMANN LABORATORY.
240 LONGWOOD AVENUE, BUILDING D, ROOM 103,
BOSTON, June 1, 1915.

The State Department of Health has established a Wassermann laboratory which offers free service to State institutions, local boards of health and, under certain conditions, to private physicians when application is made through their district health officer. The laboratory requires that the label identifying the specimen and the blank accompanying the report be properly filled out in legible writing; otherwise examinations will not be made.

The following directions are given to insure reliable results: —

1. Use only glassware furnished by this laboratory in its original condition. Mailing cases and the carbolic acid solution described below may be had upon application.

2. At least 5 cubic centimetres of blood, or 1.5 cubic centimetres of serum, and 3 cubic centimetres of spinal fluid are required.

3. The specimens of spinal fluid or blood should be placed in a refrigerator within two hours after collection, and brought to the laboratory on the same day by *messenger*. The time of collection should be so arranged that specimens reach the laboratory not later than 3 o'clock on week days except Saturday. No tests will be begun on Saturdays, Sundays or holidays. Ordinarily the report will be ready within twenty-four hours after the specimens are received, provided the directions are followed and no holiday intervenes.

4. Where *no messenger* is available the following is strongly recommended: Withdraw the serum which has separated from its clot (centrifuging to remove corpuscles if cloudy) and transfer to another tube which the laboratory will furnish on special request. The transfer is most easily made by means of an ordinary medicine dropper, which should be sterilized by boiling in clean tap water and which should be completely washed out at least three times with sterile .85 per cent. salt solution before withdrawing the serum from any specimen of blood. To the separate specimens of serum thus obtained add 2 drops

of a 2 per cent. carbolic acid solution in normal salt to approximately each 2 cubic centimetres of the serum. The separation of the serum may be facilitated by loosening the clot from the sides of the tube containing the blood with an ordinary bacteriologic platinum loop, and placing the tube in an incubator at 37° C. for thirty to forty minutes, but no longer than one hour. Spinal fluids are to be treated with 2 drops of the above described carbolic solution to approximately each 3 cubic centimetres of fluid. The specimens should be sent immediately to the laboratory by parcel post, special delivery, so that they will reach us not later than Friday of a given week for the reason above noted.

For further information address

WASSERMANN LABORATORY.

During the period from June 1 to July 24, 1,451 specimens have been examined from 12 of the 28 State institutions and from 3 private hospitals. At the same time the Wassermann Laboratory has been completely equipped and the routine so well established that it is now able to extend its services to private, charitable and municipal hospitals and institutions. In addition to this the State Department of Health is now ready to offer the facilities of the Wassermann Laboratory to patients of private physicians.

The service for patients of private physicians may be obtained through two channels: (1) through district health officers and (2) through the laboratory directly. It is required in each instance that the patient be sent either to the district health officer or to the Wassermann Laboratory directly, with a letter from his physician stating the patient's name, residence and occupation. Specimens for examination [1] will be taken at the Wassermann Laboratory on Tuesdays and Thursdays, between 3 and 5 P.M., in Building D, Room 103, of the Harvard Medical School, where the Wassermann Laboratory is situated. It will be more convenient for patients living some distance from the Wassermann Laboratory to have the specimens for examination taken by the district health officer. The physician should make an appointment with the nearest district health officer and then refer the patient to him with a letter stating the patient's name, residence and occupation. No charge is made for taking the specimens or making the test.

The importance of the Wassermann test as an aid in the diagnosis of disease is now well recognized, and physicians and institutions are invited to avail themselves of the opportunity to have the Wassermann test made as a routine examination on the blood of their patients and on spinal fluids where the facilities permit. In this way the diagnosis of syphilis may be definitely established in approximately 90 per cent. of the instances where it exists, and the proper treatment given. Such a procedure should decrease the incidence of those obstinate later manifestations of the disease which affect the heart, the blood vessels, the brain and the spinal cord, the results of which are usually serious and often incurable or may only be relieved after great suffering and expense to the patient. These late syphilitic manifestations are the most frequent causes of untimely death of otherwise strong and hearty persons.

---

[1] Lumbar puncture for spinal fluids is not made by the laboratory or district health officers because this procedure requires the facilities of a hospital or a private house with a trained attendant.

Wassermann examinations have an important bearing upon eugenics. The incidence of congenital syphilis with its high infant mortality and a large number of the premature births due to syphilis are preventable if physicians or institutions in charge of pregnant women would have the Wassermann test made on every woman during the first months of pregnancy. Specific treatment could then be given promptly as a curative and preventive measure.

It is important to have a Wassermann test made on patients in whom tuberculosis or cancer is suspected; in the former event, with the idea of preventing unnecessary prolonged residence of syphilitics in the State sanatoria, which constitutes an unwarranted financial burden upon the community, and which exposes the syphilitic to infection with tuberculosis, and the tuberculous patient to infection with syphilis. In cases of suspected cancer or other obscure malady it is important to rule out syphilis by one or more Wassermann tests, a plan which is now followed in the large and efficient private and charitable hospitals.

The prompt recognition and treatment of syphilis is a public health problem of first importance. The State Department of Health desires to encourage the use of the Wassermann test as part of all routine medical examinations, and offers the facilities of its laboratory to the citizens of the Commonwealth.

SCHOOL INSPECTION.[1]

MERRILL E. CHAMPION, M.D., C.P.H.,

State District Health Officer.

THE subject of school inspection is such a broad one, and one which may be looked at from so many interesting angles, that I shall be obliged to content myself with outlines. Moreover, I shall pass over with brief mention, only, the more complicated aspects of school inspection in the cities, and shall confine myself largely to what is being accomplished now and to what I believe can be accomplished in rural communities. The latter is the larger aspect of the case, for, outside of certain of the greater cities, school inspection is more of a name than of a reality. There is, however, so far as I can see, no real need for such a state of affairs.

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[1] Read at Sixth Annual Conference on Rural Organization, Massachusetts Agricultural College, July 28, 1915.

School inspection did not have its origin in Massachusetts nor in the United States. It has existed in Russia, for high schools, since 1871, and in Hungary since 1885. Boston began in 1894, and claims the credit of being the first city in this country to take up this new work in the school. There are now between 400 and 500 cities with some form of medical inspection, and more than 20 States with laws on the subject. The Massachusetts law dates back to 1906. Chapter 502, section 1 of the acts of that year (as amended by chapter 257 of the Acts of 1910) reads as follows: —

> SECTION 1. The school committee of every city and town in the Commonwealth shall appoint one or more school physicians, shall assign one to each public school within its city or town, and shall provide them with all proper facilities for the performance of their duties as prescribed in this act; and shall assign one or more to perform the duty of examining children who apply for health certificates, in accordance with this act: *provided, however,* that in cities wherein the board of health is already maintaining or shall hereafter maintain substantially such medical inspection as this act requires, the board of health shall appoint and assign the school physician.

A good feature of the law, provided for in section 2, calls for the examination of teachers, janitors and school buildings. This, I fear, is more honored in the breach than in the observance. Section 5 calls for an annual examination of sight and hearing to be made by the teachers.

A study of the beginnings of medical school work shows that the original idea was one really of *inspection* only, that is, the children were inspected in order to detect the presence of communicable disease. This, however, is as far as the work has got to date in most small towns. But we have only to glance at a few figures to see how much broader the scope should be. It has been found that 5 per cent. of all school children all over the world are anæmic, glandular and really unfit to attend school. I myself found 40 per cent. of the school children in certain parts of North Carolina suffering from hookworm disease; practically all of those were incapacitated for doing their best at school, while a great many could do nothing at all. Manifestly, it is a great economic waste to maintain schools for children suffering from easily preventable and curable diseases. Again, 1 per cent. of all school children have defective speech; 30 to 45 per cent. of all above the fifth grade have spinal curvature. Approximately 1 per cent. of school children are mentally defective. School inspection, strictly so called, is entirely inadequate to cope with such problems as these; medical examination and a good follow-up system is imperative, if time and money are not to be wasted.

Let us look for a moment at the status of medical school work in the average country town. The law says that every city and town shall have one or more school physicians; therefore, practically every town has one — if it can get one to serve for the money offered. The money put in the salary of the physician is, however, absurdly inadequate. Therefore the little work he does is done perfunctorily; the school doctor feels that the town is trying to get a lot out of him for nothing. There is a worse condition, nevertheless, than this; it is where the town expects nothing particular of the physician and he does not surpass expectation. In such a case even $25 per annum is money thrown away, and at the same time golden opportunities to get returns both in increased health of the school children and in actual cash saved by reason of this increased freedom from disease.

So far we have been looking at the dark side of the situation. Is there not a bright side as well? Can we not have adequate preventive work among rural school children at an expenditure within the reach of the small town? I believe such a thing is entirely possible.

Adequate medical school supervision at its minimum calls for the services of a well-trained medical man and of a trained nurse; the latter is fully as essential as the former, and perhaps more so.

The duties of the school physician should be many and varied. The most immediate one and, it will be recalled, the only one originally, would be the control of communicable disease in the school. To do this he would at least have to be on call to inspect children whom the teacher might suspect to be suffering from a communicable disease. His constant supervision of the school children should obviate the necessity of closing the school because of the presence of disease, except possibly in rare instances. It is coming to be recognized generally that children are more easily supervised in school than at home. In addition to this each child should receive a careful medical examination, preferably at the beginning of the school year. One or both parents should be present at this examination, partly to forestall possible criticism, partly because of the information as to the child's past history which they can supply, and partly for the educational effect on the parents themselves. This would help the teachers as well, and stimulate an interest in the school on the part of the taxpayers far more effectually than do the annual "closing exercises," when the young hopefuls go through the purgatory of "speaking a piece" as a prelude to the joys of vacation.

The careful physical examination should be recorded on a card and should follow the child from grade to grade, thus being a guide to both physician and teacher as to the capacity of the child. The school physician should regularly notify the parents of the defects found in their children, and should do his best to see that these defects are remedied.

In addition to the above categorical duties the physician to the school should consider himself a teacher, in matters hygienic, both of the pupils and their parents. He should be ready to give talks to the community on topics pertaining to the health and welfare of the pupils. He could lend a hand, to a certain extent at least, from his knowledge of the physical and mental makeup of the boy when the question came up — as it ought to, of course — as to what the child might or might not safely do in the way of an occupation. His reward and the town's profit would be in the children relieved of the stigma of stupidity by the removal of adenoids and by the correction of deafness and of defective eyesight; in the children relieved of danger and deformity by remedial work on the teeth; in the children saved to a life of comfort and usefulness by the early recognition of tuberculosis or the pretubercular condition.

But what of the nurse in this glowing picture of things as they should be — and may be? The nurse, as I have already said, is fully as essential as the physician. The nurse should live up to the term sometimes applied to her of "teacher's helper," as well as right-hand support of the school physician himself. The nurse should have the wisdom of the serpent and the guilelessness of the dove, to say nothing of the patience of Job. She should become the friend of every man, woman and child in the town. Her whole time should be spent in the schools or in the homes of the school children. She it is who does the invaluable "follow-up" work. By the exercise of tact and persistence she sees that the recommendations of the school physician are carried out. She must be even able to see to it that Johnnie's hair is freed of parasites without outraging the pride of Johnnie's mother. Once in the home as a friend there is no limit to the amount of good she may do. She may even have a large share in the noble work of reducing the infant mortality by her timely advice to ignorant, though well meaning, mothers. She can be the friend of the teacher, relieving her of many of her burdens. In other words, she is a missionary, helping to heal the sick and carry the good tidings of prevention of disease.

What would be the results of such a system as I have outlined? Let us turn again to some Boston figures. In 1907, 83,909 children were examined for sight and hearing, and 33,264 found defective in either sight or hearing: 31.5 per cent. in vision and 8.13 per cent. in hearing. In 1914, 12.36 per cent. only were defective in vision instead of 31.5; and 2.7 per cent. in hearing instead of the 8.13 per cent.

There has been some opposition to school physicians by the general practitioner of medicine on the ground of interference with his practice. This should not occur. In fact the result should be that he should have the opportunity to correct many defects which otherwise would never have come to him. As a matter of fact, that has been the experience of Boston dentists since the institution of dental prevention work in the schools.

The last point we have to consider is, how can all this be brought about without an expenditure of money utterly out of the question for a small town? Frankly, it cannot be done if the present system is adhered to. A physician in general practice, especially a busy country practice, simply cannot do these things for the trifling sum usually offered him; and it is best that he should not do so. Medical school supervision is gradually becoming a highly differentiated work, — a specialty, in other words. It demands time and promptness; it cannot properly be tucked in at spare intervals between professional calls. Likewise, the man doing school supervision should be beyond the possibility of suspicion of unfairness through self-interest; he should not be in competition with the other physicians of the locality. The inevitable and only answer to the problem is co-operation between towns in the support of a high-grade, whole-time physician and a good trained nurse. "In union there is strength" is as true of school inspection as of government. If one town cannot afford to support such a man let five towns do it. Of course it goes without saying that each town would be obliged to spend more on school inspection than it is now doing, but then, most towns are now getting practically no return for the little they do spend. Good school inspection, like good milk, cannot be bought for the price of poor; and in each case it is very poor economy to put up with an inferior article. For very small places it might be quite possible to have a whole-time health officer do the school inspection as is done in some of the southern States. But the point I want to insist upon is this: school inspection is necessary; it pays; it is here to stay; and though half a loaf is better than none at all, and though some supervision is better than no supervision, none the less, the only ultimate solution of the problem will be by co-operation among towns to secure competent physicians and nurses at a living salary.

EARLY DIAGNOSIS OF PULMONARY TUBERCULOSIS IN ADULTS AND IN CHILDREN.[1]

DIAGNOSIS IN ADULTS.

Do's.

REMEMBER the following points: —

1. Take a careful history of your patient. Ask definite questions in a logical and regular sequence. Every patient should be asked whether during the years from fifteen to twenty-one he considered himself, or was considered by his parents, as of the strong and robust type, the thin and wiry type or of the delicate type. It is important to ask not, "When did you first feel sick?" but rather, "When did you last feel perfectly well?"

2. Remember the paramount importance of constitutional signs and symptoms.

In most cases, except for a cough, which is usually present, the constitutional signs and symptoms are far more striking than local symptoms.

3. Remember that loss of weight must be satisfactorily explained.

Every patient should be asked, first, "What is your maximum weight?" second, "Your present weight?" third, "What do you consider good average weight in health?" fourth, if the patient has lost weight, "Over how long a period has this loss taken place, and how do you account for it?"

4. Inquire concerning loss of strength and energy.

5. Do not forget the importance of undue fatigue and ease of tire.

6. Continual or occasional evening fever must be explained.

The thermometer is not used anyway nearly as much as it should be. In the absence of other definite causes, if a patient is found to be running an afternoon or evening fever of 99° or over, a tentative diagnosis of some such infection or toxemia as tuberculosis is justifiable.

7. Remember the importance of a subnormal temperature accompanied by a high pulse.

This combination is an important one and is often caused by tuberculosis.

---

[1] This article has been prepared at the request of many physicians in this State. The importance of early diagnosis of tuberculosis has been emphasized very strongly during the past few years. With the advent of the municipal dispensaries the opportunity for the detection of many cases of this disease which would otherwise escape attention is apparent. That the physicians are desirous of doing their very best is evident from their request for a short but comprehensive statement of the main points that must be constantly borne in mind if success is to be attained in the difficult problem of the early diagnosis of this insidious disease. It is also being printed as a physician's pocket notebook, copies of which may be had on application to the State Health Department.

8. Remember that a hemorrhage is evidence of pulmonary tuberculosis until the contrary is proved.

Failure to observe this rule is causing many tragedies and unnecessary deaths.

9. Bear in mind that pulmonary syphilis is not so uncommon as it is supposed to be.

10. Remember that early cases of exophthalmic goitre may simulate early pulmonary tuberculosis in every way.

11. Depend more on your thermometer, your history and constitutional signs and symptoms than you do on percussion and auscultation.

12. Remember to use your common sense.

Bear in mind that it is a human being and not merely a pair of lungs that you are dealing with.

Don'ts.

Do not forget the following: —

1. Don't be in too much of a hurry.

2. Don't forget to strip the patient to the waist.

3. Do not expect to find marked signs in the lungs in every case.

4. Do not wait for a positive sputum.

Absence of proof is not proof of absence.

5. Don't forget that practically all pleurisies, wet or dry, of idiopathic origin, are tuberculous.

6. Don't forget to look elsewhere than the lungs.

Make your routine physical examination as thorough as possible.

7. Don't base your diagnosis on X-ray evidence alone.

The X-ray is a valuable adjunct to our means of physical examination; it should never take the place of our older, well-known methods.

8. In adults do not place any value on the skin tuberculin test, whether positive or negative.

9. Don't forget that chronic bronchitis, influenza, bronchiectasis, emphysema, asthma and other chronic and subacute lung conditions still exist and will continue to exist, and that they often resemble pulmonary tuberculosis.

10. Don't forget that the reverse of the above is also true.

11. Don't forget that people may be run down, tired, weak, etc., without having consumption.

DIAGNOSIS IN CHILDREN.

Do's.

Remember the following points: —

1. Remember the difference between tuberculous infection and tuberculous disease.

2. Remember the frequency of tuberculous infection.

3. Remember that in children tuberculosis is primarily a disease of the glandular system.

Whereas in infancy tuberculosis takes the form of a general septicæmia, and is rapidly fatal, in the years of childhood it primarily affects the glandular system all over the body. It is only when this first line of defence is broken through that the lungs or other organs are affected.

4. Remember the importance of exposure, and that bovine as well as human sources are of importance.

This is particularly important in the case of children. Tuberculosis in children is often due to tuberculous milk.

5. Remember that in children by the time the lungs themselves are involved the disease is far advanced.

In these real early cases one rarely finds signs at the apices. It is by means of a positive cutaneous tuberculin test, the X-ray, perhaps slight interscapular dullness, sometimes enlarged veins on the chest, frequently a positive d'Espine's sign, combined with constitutional signs and symptoms, on which the diagnosis is based.

6. Remember the importance of constitutional signs and symptoms.

The principal constitutional signs and symptoms are case of tire, the loss of weight or failure to gain weight, pallor, malnutrition and debility.

7. Remember that while in adults there is no cough characteristic of tuberculosis, in children there may be present a cough which is more or less characteristic of bronchial gland enlargement. These bronchial glands are situated at the root of the lungs, and if they attain sufficient size may press on the trachea, the large bronchi or on nerves, and thereby cause a paroxysmal, strident, brassy cough, usually without sputum, often closely resembling whooping cough.

8. Remember that a positive skin tuberculin reaction is of infinitely greater importance in children than in adults, but that its value becomes less and less with increased age.

9. Remember that the X-ray in children may show enlarged bronchial glands, but that it does not prove these glands to be necessarily tuberculous.

Don'ts.

Don't forget the following points: —

1. Don't fail to realize the responsibility you are taking in stamping a child as tuberculous.

2. Do not forget in cases of doubt that it is possible, and far better, to institute proper treatment without casting the stigma of tuberculosis.

3. Don't make up your mind beforehand as to what you are going to find.

4. Don't forget that while a positive d'Espine sign is good evidence of enlarged mediastinal glands, it does not prove that they are tuberculous.

A positive d'Espine, or, in other words, bronchial whispered voice sounds, heard below the level of the fourth dorsal vertebra, is good evidence that the mediastinal glands are enlarged. It is not safe, however, from this sign alone to draw any further conclusions.

5. Do not expect to find marked signs in the lungs in every case of bronchial gland enlargement.

A type case is characteristic. Substernal dullness, interscapular dullness, enlarged veins on the chest, glands in the neck and paroxysmal, brassy cough make evident the underlying condition. In most instances, however, the diagnosis must be based on far less than this.

6. Don't forget that processes due to influenza, the pneumococcus and other organisms are common in children, and are often mistaken for tuberculosis.

Little patches of consolidation, due to either influenza or the pneumococcus, may simulate in every way one due to tuberculosis. While the treatment is approximately the same, the prognosis is, of course, very different.

7. Don't forget that improper feeding, diseased tonsils and increased adenoid tissue, a chronic middle ear and other conditions, may simulate tuberculosis.

8. Don't forget that your diagnosis rests, not on one or two striking signs and symptoms, but on an accumulated mass of single details.

9. Do not forget to be frank and open with the parents, and to explain to them the exact situation.

OPINION OF THE ATTORNEY-GENERAL AS TO THE SALE OR OFFERING FOR SALE OF VINEGAR BELOW THE PRESCRIBED STANDARD.

The Commonwealth of Massachusetts,
Department of the Attorney-General,
Boston, June 28, 1915.

Dr. Allan J. McLaughlin, *Commissioner of Health.*

Dear Sir: — You have requested my opinion as to whether, under chapter 158 of the General Acts of 1915, if cider vinegar is diluted and labelled as described in the statute, it is necessary that the acetic acid content and the solids both be above the legal standard, or whether the vinegar may be diluted to such an extent that the solids are below the standard if the acidity remains above the standard.

R. L., c. 57, § 67, as amended by St. 1911, c. 600, § 2, provides: —

> Vinegar shall contain no added artificial coloring matter, and shall contain not less than four and one half per cent. by weight, of absolute acetic acid. Cider vinegar shall in addition contain not less than one and eight tenths per cent. by weight, of cider vinegar solids upon full evaporation at the temperature of boiling water. If vinegar contains any added or artificial coloring matter, or less than the required amount of acidity, or if cider vinegar contains less than the required amount of acidity or of cider vinegar solids, it shall be deemed to be adulterated.

It therefore is indicated by the foregoing that cider vinegar containing less than the required amount either of acidity or of solids shall be deemed to be adulterated. R. L., c. 57, § 66, as amended by section 1 of the Acts of 1911, imposes a penalty upon persons selling or offering for sale adulterated vinegar.

The 1915 act is an amendment of section 3 of the 1911 act relating to the marking of the containers of vinegar, and provides, in part: —

> And cider vinegar, if diluted with water, shall be distinctly and conspicuously labelled to indicate this fact, as for example, "Diluted to Legal Strength."

There seems to be nothing in this provision which would affect the express provision quoted above, that vinegar below the standard, either as to acidity or solids, shall be deemed to be adulterated, and the fact that the example of proper branding given in the 1915 act, "Diluted to Legal Strength," would indicate the intention of the

Legislature not to permit dilution below the standard as fixed in the first two sections of St. 1911, c. 600.

In my opinion the 1915 act does not permit of the sale or offering for sale of vinegar below the prescribed standard, either as to acidity or as to solids.

Very truly yours,

HENRY C. ATWILL,
Attorney-General.

REGULATIONS OF THE STATE DEPARTMENT OF HEALTH RELATIVE TO METHODS FOR THE ESTIMATION OF TOTAL SOLIDS AND ACETIC ACID IN VINEGAR.

At a meeting of the State Department of Health held on July 6, 1915, it was voted to make the following regulations relative to the methods for the estimation of total solids and acetic acid in vinegar: —

According to the provisions of chapter 239 of the General Acts of 1915, the following are hereby declared, until further notice, to be the methods for the estimation of the solids and the acid content of vinegar for determining the composition or value of said vinegar as a basis for payment in buying or in selling, or for the purpose of inspection: —

Solids. — Measure 10 cubic centimetres of filtered vinegar into a tared flat-bottom platinum dish of 50 millimeter diameter, evaporate on the water bath to a thick syrup and dry for exactly two and one-half hours in the drying oven at the temperature of boiling water; cool and weigh. It is essential to use a flat-bottom dish.

Total Acids. — Titrate a suitable amount of the sample, which has been diluted until it appears very slightly colored, with standard alkali, using phenolphthalein as indicator. One cubic centimetre of tenth-normal alkali is equivalent to 0.0060 gram of acetic acid.

All weights and measures, if used by a chemist of recognized standing, must have been standardized by himself, and if used by other than a chemist of recognized standing must have been standardized by the Bureau of Standards at Washington, D. C. All alkali used in the estimation of the acid content of vinegar must have been standardized by a chemist of recognized standing.

ALLAN J. McLAUGHLIN, M.D.,
Commissioner of Health.

REGULATIONS OF THE STATE DEPARTMENT OF HEALTH RELATIVE TO THE MARKING OF COLD STORAGE EGGS.

At a meeting of the State Department of Health held on July 6, 1915, it was voted to make the following regulations relative to the marking of cold storage eggs: —

The sign or placard required by section 1 of chapter 538 of the Acts of 1913, as amended by chapter 55 of the General Acts of 1915, to be placed upon or immediately above cold storage eggs, or upon the basket, box or other container in which cold storage eggs are placed, shall consist of the words "Cold Storage Eggs," printed in uncondensed Gothic type, in letters not less than one inch in height, printed in black on a white background, no other lettering to appear on or to be attached to said sign or placard. (This sign or placard to be used only where cold storage eggs are offered or exposed for sale.)

The marking required by section 1 of chapter 538 of the Acts of 1913, as amended by chapter 55 of the General Acts of 1915, to be placed upon the container in which cold storage eggs sold at retail are delivered to the customer, shall consist of the words "Cold Storage Eggs," printed or stamped in letters not less than one inch in height, or, if in letters of uncondensed Gothic type, not less than one-half inch in height, in black, purple or red ink, no other lettering to appear in connection with the words "Cold Storage Eggs."

ALLAN J. McLAUGHLIN, M.D.,
Commissioner of Health.

FOOD AND DRUGS.

The following tables present the results of the laboratory examinations of samples of food and drugs collected during the month of June, 1915: —

The cities and towns in which samples were collected were: Abington, Amherst, Arlington, Ayer, Billerica, Blackstone, Boston, Braintree, Bridgewater, Brockton, Brookfield, Brookline, Cambridge, Chelsea, Concord, Dedham, Dracut, Everett, Fall River, Fitchburg, Great Barrington, Haverhill, Holyoke, Lawrence, Lee, Lowell, Lynn, Malden, Medfield, Mendon, Middleton, Millis, Milton, Natick, Needham, New Bedford, Newton, North Brookfield, Northampton, Pittsfield, Plymouth, Quincy, Randolph, Revere, Salem, Saugus, Somerville, Stoneham, Uxbridge, Waltham, Watertown, Wellesley, Weymouth and Winthrop.

SUMMARY OF ANALYSES.

ARTICLES EXAMINED.	Number found to be of Good Quality.	Number adulterated or varying from the Legal Standard.	Total.
Butter,	1	–	1
Cocoa,	1	–	1
Condimental sauces,	2	–	2
Confectionery,	2	–	2
Cooking fat,	1	–	1
Cream,	7	–	7
Drugs,	141	16	157
Eggs,	5	–	5
Fish,	1	1	2
Frosting,	5	–	5
Grape juice,	1	–	1
Honey,	2	–	2
Ice cream,	44	–	44
Jams and jellies,	5	–	5
Maple sugar,	6	1	7
Meat products: —			
Sausages,	5	–	5
Beef trimmings, [1]	–	5	5
Chickens, [1]	4	–	4
Fowl, [1]	–	2	2
Pork loins, [1]	1	–	1
Roosters, [1]	2	–	2
Milk,	553	174	727
Olive oil,	1	–	1
Spices,	4	–	4
Soft drinks,	2	–	2
Soda water syrups,	18	11	29
Syrups,	1	–	1
Vinegar,	2	2	4
Totals,	817	212	1,029

[1] Taken from cold storage.

PROSECUTIONS FOR VIOLATIONS OF THE LAW RELATING TO FOOD AND DRUGS.

Eleven convictions were secured during the month of June, 1915, for the sale of adulterated food and drugs, and for violation of the slaughtering laws, as follows: —

NAME OF DEFENDANT.	Place.	Character of Article sold or Nature of Offence.
George Bolles,	Wellesley,	Milk (total solids, 10.92).
Isaac Gisin,	Springfield,	Milk (total solids, 11.48).
Miles P. Keene,	North Weymouth,	Milk (total solids, 11.30).[1]
John F. Owen,	South Weymouth,	Milk (total solids, 12.19).[1]
Thomas F. Riley,	Tewksbury,	Milk (total solids, 9.64).[1]
Frank D. Tait,	Springfield,	Milk (total solids, 11.70).
John A. McGinty,	Springfield,	Spirit of camphor (not U.S.P.).
Simon J. Curran,	Lee,	Uninspected and unstamped meat in his possession.
John Gilday,	Newburyport,	Uninspected and unstamped meat in his possession.
P. O. Malumphy,	Lee,	Slaughtering without inspector present.[2]
Philip Solomon,	North Adams,	Slaughtering without inspector present.

[1] Watered.

[2] Appealed.

Fines imposed, $215.

ARTICLES IN COLD STORAGE CONDEMNED, UPON PHYSICAL AND CHEMICAL EXAMINATIONS, AS UNFIT FOR FOOD.

Date.	ARTICLES.	Weight (Pounds).	Reasons.	Disposition.
May 20, 1915	Chickens,	290	Decomposed,	Rendered.
May 25, 1915	Chickens,	164	Decomposed,	Rendered.
May 25, 1915	Miscellaneous fowl,	195	Decomposed,	Rendered.
May 25, 1915	Fowl,	105	Decomposed,	Rendered.
June 2, 1915	Sand eels,	70	Soiled and dried,	Rendered.
June 2, 1915	Beef trimmings,	780	Tainted,	Rendered.
June 3, 1915	Miscellaneous fish,	900	Soiled and dried,	Rendered.
June 9, 1915	Geese,	932	Tainted and rancid,	Rendered.
June 9, 1915	Geese,	195	Tainted and rancid,	Rendered.
June 15, 1915	Mutton flanks,	110	Soiled, dried and rancid,	Rendered.
June 16, 1915	Fowl,	454	Decomposed,	Rendered.
June 21, 1915	Salmon,	60	Soiled and dried,	Rendered.
June 21, 1915	Miscellaneous fish,	745	Soiled and dried,	Rendered.
June 24, 1915	Chickens,	120	Decomposed,	Rendered.
June 24, 1915	Broilers,	27	Decomposed,	Rendered.
June 24, 1915	Rabbits,	43	Dried,	Rendered.
June 24, 1915	Pork loins,	201	Decomposed,	Rendered.
June 26, 1915	Ducks,	176	Decomposed,	Rendered.
Total,		5,567		

SLAUGHTERING.

During the month of June, 1915, the following confiscation was made: —

Date.	ARTICLE.	Weight (Pounds).	Reason.	Disposition.
June 10, 1915	Veal, . . .	28	Immature, . . .	Mutilated.

SAMPLES OF FOOD WHICH UPON EXAMINATION WERE FOUND TO BE ADULTERATED.

SODA WATER SYRUPS.

Contained Benzoic Acid.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
27877	H. B. Brown, Revere.	
27789	Confectionery Store, 2109 Washington Street, Boston.	
27874	Crescent Spa, Revere.	
27878	A. George, Revere.	
27801	Abraham Goldberg, Boston.	
27799	Kacavas & Sons, Boston.	
27872	H. Katz, Revere.	
27882	G. E. Palmer, Revere.	
27880	John Shaeb, Revere.	
27879	D. Wheeler, Revere.	

RASPBERRY JAM.

Contained Benzoic Acid.

27854	Fox Brothers, Boston, ...	Atwood's, Atwood Preserving Company, Cambridge.

SAMPLES OF DRUGS WHICH UPON EXAMINATION WERE FOUND TO BE ADULTERATED.

SPIRIT OF ANISE.

Number of Sample.	Dealer.	Per Cent. of Required Strength.
2090-A	Drug Store, Massachusetts Avenue, Arlington,	37
2334-A	C. F. Eaton, Boston,	29
2180-A	W. A. Wry, Revere,	70

SPIRIT OF CAMPHOR.

Number of Sample.	Dealer.	Per Cent. of Required Strength.
2288-A	Edward J. Murphy, Quincy,	12

SPIRIT OF NITRE.

Number of Sample.	Dealer.	Per Cent. of Required Strength.
27651	Arborway Pharmacy, Jamaica Plain,	48
q 16509	D. Cangiano, Boston,	29
1547-T	John H. Cronin Sons, Lawrence,	71
2744-A	Fred M. Gardner, Boston,	76
1555-T	Walter J. Keating, Lawrence,	69
1571-T	John W. Patrick, Lawrence,	58
2766-A	Thomas F. Ryan, Plymouth,	79

SAMPLES OF MILK WHICH UPON EXAMINATION WERE FOUND TO BE ADULTERATED.

Number of Sample.	Name of Dealer, Wholesaler or Producer.	Results of Analyses.
27746	Adams Bros., Needham,	Total solids, 11.46 per cent.; fat, 2.80 per cent.; proteins, 3.18 per cent.; skimmed milk.
1345-T	Charles Burrill, Bridgewater,	Total solids, 11.60 per cent.; fat, 2.70 per cent.; proteins, 3.19 per cent.; skimmed milk.
q 16410	Alderic Gerard, Blackstone,	Total solids, 10.60 per cent.; fat, 2.75 per cent.; contained added water.
q 16403	Joseph Lamouthe, Blackstone,	Total solids, 11 per cent.; fat 2.20 per cent.; proteins, 2.94 per cent.; skimmed milk.
27688	V. Langlois, New Bedford,	Total solids, 10.32 per cent.; fat, 3 per cent.; contained added water.
q 16433	Ephraim Marquis, Blackstone,	Total solids, 11.07 per cent.; fat, 3.20 per cent.; contained added water.
q 16434	Ephraim Marquis, Blackstone,	Total solids, 10.88 per cent.; fat, 3.10 per cent.; contained added water.
q 16435	Ephraim Marquis, Blackstone,	Total solids, 10.64 per cent.; fat, 3.10 per cent.; contained added water.
q 16436	Ephraim Marquis, Blackstone,	Total solids, 10.84 per cent.; fat, 3.75 per cent.; contained added water.
1273-T	John F. Owen, South Weymouth,	Total solids, 12.19 per cent.; fat, 4.40 per cent.; contained added water.

REPORT UPON THE WORK OF THE BACTERIOLOGICAL LABORATORY FOR THE MONTH OF JUNE, 1915.

The following gives the total number of biological products and diagnostic outfits distributed by the bacteriological laboratory of the State Department of Health during the month of June, 1915: —

Biological Products.

Diphtheria antitoxin: —	
2,000 units (Special for the Boston City Hospital),	138 bottles.
4,000 units (Special for the Boston City Hospital),	342 bottles.
6,000 units (Special for the Boston City Hospital),	42 bottles.
12,000 units (Special for the Boston City Hospital),	228 bottles.
15,000 units (Special for the Boston City Hospital),	63 bottles.
3,000 units,	2,250 bottles.
1,500 units,	389 bottles.
750 units,	477 bottles.
Smallpox vaccine,	5,789 tubes.
Typhoid vaccine,	7,502 ampoules.
Antimeningitis serum,	86 bottles.
Silver nitrate solution,	185 droppers.

Diagnostic Outfits.

Culture tubes,	744
Media,	48
Sputum bottles,	513
Widal outfits,	166
Bile outfits,	23
Malaria outfits,	13

The following gives the total number of bacteriological examinations made in the laboratory of the State Department of Health during the month of June, 1915: —

	Number of Examinations.	DIAGNOSIS.		RELEASE.	
		Positive.	Negative.	Positive.	Negative.
Diphtheria,	535	80	228	66	161

	Number of Examinations.	Positive.	Negative.	*Atypical.
Tuberculosis,	243	57	186	
*Typhoid fever (Widal test),	97	14	74	9
Typhoid fever (culture test),	18	4	14	
*Paratyphoid fever,	2	–	2	–
Malaria,	6		6	
Miscellaneous,	106			

Total number of examinations made, 1,007.

RETURNS OF DISEASES.

Cases of Disease declared by the State Department of Health to be Dangerous to the Public Health.

[Under the provisions of section 52 of chapter 75 of the Revised Laws.]

DISEASE.	Week ending —				
	June 5.	June 12.	June 19.	June 26.	Total.
Anterior poliomyelitis,	1	–	2	1	4
Anthrax,	–	–	1	–	1
Cerebro-spinal meningitis,	2	9	3	3	17
Chicken pox,	92	71	91	102	356
Diphtheria,	135	140	168	134	577
Dogbite (requiring antirabic treatment),	5	1	13	10	29
German measles,	20	2	15	9	46
Infectious diseases of the eye —					
(*a*) Ophthalmia neonatorum,	39	49	61	51	200
(*b*) Trachoma,	1	2	1	–	4
Malaria,	–	7	2	3	12
Measles,	989	962	906	906	3,763
Mumps,	48	50	42	70	210
Pellagra,	2	–	1	2	5
Scarlet fever,	255	208	201	173	837
Septic sore throat,	11	12	6	2	31
Smallpox,	5	2	4	3	14
Tetanus,	2	2	–	2	6
Tuberculosis, pulmonary (or not classified),	148	180	153	178	659
Tuberculosis, other forms,	31	16	28	31	106
Typhoid fever,	16	20	29	33	98
Whooping cough,	128	142	148	132	550

RETURNS OF DEATHS.

Weekly Returns of Deaths from Diseases declared by the State Department of Health to be Dangerous to the Public Health.

[Under the provisions of chapter 210, Acts of 1913.]

DISEASE.	Week ending —				
	June 5.	June 12.	June 19.	June 26.	Total.
Anterior poliomyelitis,	1	1	–	1	3
Cerebro-spinal meningitis,	–	2	3	2	7
Chicken pox,	–	2	–	–	2
Diphtheria,	10	14	7	4	35
Measles,	2	6	4	6	18
Ophthalmia neonatorum,	–	2	–	–	2
Scarlet fever,	7	7	4	–	18
Septic sore throat,	1	–	1	–	2
Smallpox,	–	2	2	3	7
Tetanus,	–	2	1	–	3
Tuberculosis, pulmonary (or not classified),	64	67	67	78	276
Tuberculosis, other forms,	12	11	12	8	43
Typhoid fever,	–	7	2	3	12
Whooping cough,	7	6	10	6	29

WEEKLY RETURNS OF DEATHS FROM DISEASES DECLARED BY THE STATE DEPARTMENT OF HEALTH TO BE DANGEROUS TO THE PUBLIC HEALTH BY CITIES AND TOWNS IN MASSACHUSETTS.

[Under the provisions of chapter 210, Acts of 1913.]

In all cases where the name of the community is not mentioned it signifies that no deaths from these diseases have been reported to this office for the period covered by the table.

Week ending June 5, 1915.

CITIES AND TOWNS.	Population. Census for 1910.	Diphtheria.	Measles.	Scarlet Fever.	Tuberculosis, Pulmonary (or not classified).	Tuberculosis, Other Forms.	Typhoid Fever.	Whooping Cough.
Boston,	686,092	6[1]	2	3	15	4[1]	–	3
Worcester,	145,986	–	–	–	3	–	–	–
Fall River,	119,295	–	–	–	5	–	–	1
Cambridge,	104,839	–	–	–	5	–	–	–
Lynn,	89,336	–	–	–	1	2	–	–
Springfield,	88,926	–	–	–	5	1	–	1
Lawrence,	85,892	1	–	–	3	–	–	–
Somerville,	77,236	–	–	–	3	–	–	1
Holyoke,	57,730	–	–	1	1	–	–	–
Malden,	44,404	–	–	1	–	–	–	–
Haverhill,	44,115	–	–	–	2	–	–	–
Fitchburg,	37,826	1	–	–	2	–	–	–
Taunton,	34,259	–	–	–	1	–	–	–
Everett,	33,484	–	–	–	2	–	–	–
Quincy,	32,642	–	–	–	1	–	–	–
Chelsea,	32,452	–	–	–	–	1	–	–
Pittsfield,	32,121	–	–	–	1	–	–	–
Waltham,	27,834	–	–	–	1	–	–	–
Medford,	23,150	–	–	–	1	–	–	–
Northampton,	19,431	–	–	–	2	–	–	–
Beverly,	18,650	1	–	–	–	–	–	–
Westfield,	16,044	–	–	–	2[2]	–	–	–
Gardner,	14,699	–	–	–	1	–	–	–
Marlborough,	14,579	–	–	–	1	–	–	–
Clinton,	13,075	–	–	–	–	1	–	–
Webster,	11,509	–	–	–	–	1	–	–
West Springfield,	9,224	–	–	–	–	–	–	1
Middleborough,	8,214	1	–	–	–	–	–	–
Fairhaven,	5,122	–	–	1	–	–	–	–
Templeton,	3,756	–	–	–	1	–	–	–
Cohasset,	2,585	–	–	–	–	1	–	–
Wilbraham,	2,332	–	–	–	1	–	–	–
West Bridgewater,	2,231	–	–	–	–	1	–	–
Freetown,	1,471	–	–	1	–	–	–	–
Lakeville,	1,141	–	–	–	1	–	–	–
North Reading,	1,059	–	–	–	3	–	–	–
Totals,	–	10	2	7	64	12	–	7

One death from anterior poliomyelitis was reported from Melrose, and 1 death from septic sore throat from Springfield.

[1] One nonresident.

[2] Two nonresidents.

Week ending June 12, 1915.

CITIES AND TOWNS.	Population. Census for 1910.	Diphtheria.	Measles.	Scarlet Fever.	Tuberculosis, Pulmonary (or not classified).	Tuberculosis, Other Forms.	Typhoid Fever.	Whooping Cough.
Boston,	686,092	10[1]	2	3[2]	26[2]	4[2]	1	2
Worcester,	145,986	–	–	–	4	–	–	–
Fall River,	119,295	1	2	4	–	–	3	1
Lowell,	106,294	–	–	–	4	1	–	–
Cambridge,	104,839	–	–	–	3	–	–	1
New Bedford,	96,652	–	1	–	4	–	–	–
Lynn,	89,336	1	–	–	2	1	–	–
Lawrence,	85,892	–	–	–	1	1	–	–
Somerville,	77,236	–	–	–	–	–	2	–
Holyoke,	57,730	–	–	–	2	–	–	–
Brockton,	56,878	–	–	–	1	1	–	–
Haverhill,	44,115	–	–	–	1	–	–	–
Salem,	43,697	–	–	–	–	1	–	–
Newton,	39,806	–	–	–	2	–	–	1
Taunton,	34,259	–	–	–	1	–	–	1
Pittsfield,	32,121	–	–	–	2	–	–	–
Waltham,	27,834	–	–	–	1	1	–	–
Brookline,	27,792	2	–	–	2	–	–	–
North Adams,	22,019	–	–	–	1	–	–	–
Westfield,	16,044	–	–	–	2[1]	1[2]	1	–
Peabody,	15,721	–	–	–	1	–	–	–
Woburn,	15,308	–	–	–	1	–	–	–
Framingham,	12,948	–	–	–	–	–	1	–
Weymouth,	12,895	–	–	–	1	–	–	–
Greenfield,	10,427	–	–	–	1	–	–	–
North Attleborough,	9,562	–	–	–	1	–	–	–
Bridgewater,	7,688	–	–	–	1	–	–	–
Fairhaven,	5,122	–	1	–	–	–	–	–
Amherst,	5,112	–	–	–	1	–	–	–
Wareham,	4,102	–	–	–	1	–	–	–
Ayer,	2,797	–	–	–	1	–	–	–
North Reading,	1,059	–	–	–	1	–	–	–
Totals,	–	14	6	7	67	11	7	6

Two deaths from cerebro-spinal meningitis were reported: 1 from Boston (nonresident) and 1 from Peabody; 2 deaths from chicken pox and 2 deaths from ophthalmia neonatorum were reported from Fall River; 2 deaths from smallpox from New Bedford; 1 death from anterior poliomyelitis from Walpole; and 2 deaths from tetanus, 1 from Boston (nonresident) and 1 from Peabody

[1] Two nonresident.

[2] One nonresident.

Week ending June 19, 1915.

CITIES AND TOWNS.	Population. Census for 1910.	Diphtheria.	Measles.	Scarlet Fever.	Tuberculosis, Pulmonary (or not classified).	Tuberculosis, Other Forms.	Typhoid Fever.	Whooping Cough.
Boston,	686,092	1	1	3[1]	18	4	–	5
Worcester,	145,986	1	–	–	5	–	–	–
Fall River,	119,295	–	–	–	5	1	1	–
Lowell,	106,294	–	–	–	3	1	–	–
Cambridge,	104,839	1	–	–	4	–	–	1
New Bedford,	96,652	2	–	–	1	1	–	–
Lynn,	89,336	–	1	–	1	2	–	–
Springfield,	88,926	–	–	–	3	–	–	1
Lawrence,	85,892	–	–	–	1	–	–	–
Holyoke,	57,730	–	–	–	–	–	–	1
Brockton,	56,878	–	–	–	1	1	–	–
Malden,	44,404	2	–	1	–	–	–	–
Haverhill,	44,115	–	–	–	3	–	–	–
Salem,	43,697	–	–	–	1	–	–	–
Fitchburg,	37,826	–	–	–	1	–	–	–
Taunton,	34,259	–	–	–	1	–	–	–
Waltham,	27,834	–	–	–	1	–	–	–
Northampton,	19,431	–	–	–	1	1	–	–
Revere,	18,219	–	–	–	2	–	–	–
Westfield,	16,044	–	–	–	1[1]	–	–	–
Peabody,	15,721	–	1	–	1	–	–	–
Adams,	13,026	–	–	–	2	–	–	–
Weymouth,	12,895	–	–	–	2	–	–	–
Webster,	11,509	–	–	–	1	–	–	–
Dedham,	9,284	–	–	–	1	–	–	–
Palmer,	8,610	–	–	–	1	–	–	–
Easthampton,	8,524	–	–	–	–	–	–	1
Braintree,	8,066	–	–	–	–	–	1	–
Belmont,	5,542	–	–	–	1	–	–	–
North Andover,	5,529	–	–	–	–	1	–	–
Hingham,	4,965	–	–	–	1	–	–	–
Walpole,	4,892	–	–	–	1	–	–	–
Randolph,	4,301	–	1	–	–	–	–	–
Foxborough,	3,863	–	–	–	1	–	–	–
Norton,	2,544	–	–	–	–	–	–	1
Lakeville,	1,141	–	–	–	1	–	–	–
Hatfield,	1,986	–	–	–	1	–	–	–
Totals,	–	7	4	4	67	12	2	10

Three deaths from cerebro-spinal meningitis were reported: 2 from Boston and 1 from Lawrence; 2 deaths from smallpox were reported from New Bedford; 1 from septic sore throat and 1 from tetanus from Springfield.

[1] One nonresident.

Week ending June 26, 1915.

CITIES AND TOWNS.	Population. Census for 1910.	Diphtheria.	Measles.	Scarlet Fever.	Tuberculosis, Pulmonary (or not classified).	Tuberculosis, Other Forms.	Typhoid Fever.	Whooping Cough.
Boston, ...	686,092	3[1]	2	–	28[1]	3	2[2]	–
Worcester, ...	145,986	–	–	–	2	2	–	1
Fall River, ...	119,295	–	–	–	2	–	–	–
Lowell, ...	106,294	–	–	–	2	–	1	–
Cambridge, ...	104,839	–	–	–	5	–	–	1
New Bedford, ...	96,652	–	1	–	3	–	–	–
Lynn, ...	89,336	–	–	–	2	–	–	–
Springfield, ...	88,926	–	–	–	2	1	–	1
Lawrence, ...	85,892	–	2	–	7	–	–	1
Holyoke, ...	57,730	–	–	–	1	–	–	–
Malden, ...	44,404	–	–	–	–	1	–	–
Haverhill, ...	44,115	–	–	–	1	–	–	–
Salem, ...	43,697	–	1	–	–	–	–	–
Fitchburg, ...	37,826	–	–	–	–	–	–	1[3]
Taunton, ...	34,259	–	–	–	5	–	–	–
Everett, ...	33,484	–	–	–	1	–	–	–
Chelsea, ...	32,452	–	–	–	–	1	–	–
Pittsfield, ...	32,121	–	–	–	1	–	–	–
Waltham, ...	27,834	–	–	–	1	–	–	–
Northampton, ...	19,431	–	–	–	1	–	–	–
Peabody, ...	15,721	–	–	–	–	–	–	1
Melrose, ...	15,715	–	–	–	1	–	–	–
Marlborough, ...	14,579	1	–	–	–	–	–	–
Adams, ...	13,026	–	–	–	1	–	–	–
West Springfield, . . .	9,224	–	–	–	1	–	–	–
Blackstone, ...	5,648	–	–	–	1	–	–	–
North Andover, . . .	5,529	–	–	–	1	–	–	–
Fairhaven, ...	5,122	–	–	–	1	–	–	–
Foxborough, ...	3,863	–	–	–	1	–	–	–
Agawam, ...	3,501	–	–	–	1	–	–	–
Somerset, ...	2,798	–	–	–	1	–	–	–
West Bridgewater, . . .	2,231	–	–	–	1	–	–	–
Lakeville, ...	1,141	–	–	–	2	–	–	–
North Reading, ...	1,059	–	–	–	1	–	–	–
Ashfield, ...	959	–	–	–	1	–	–	–
Totals, ...	–	4	6	–	78	8	3	6

Two deaths from cerebro-spinal meningitis were reported: 1 from Cambridge and 1 from Worcester; 3 deaths from smallpox from New Bedford; and 1 death from anterior poliomyelitis from Pittsfield.

[1] One nonresident.
[2] Two nonresidents.
[3] Pneumonia and whooping cough.

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PUBLIC HEALTH BULLETIN

ISSUED MONTHLY
BY THE
STATE DEPARTMENT OF HEALTH
OF MASSACHUSETTS

AUGUST, 1915

Vol. 2, No. 7

ALLAN J. McLAUGHLIN, M.D., *Commissioner*

"THE COMMON HEALTH OF THE COMMONWEALTH"

Entered as Second-class Matter Oct. 26, 1914, at the Post Office at Boston, Mass.
under the Act of Aug. 24, 1912

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Approved by
The State Board of Publication.

NANTUCKET MEASLES EPIDEMIC.

Dr. Adam S. MacKnight, *State District Health Officer.*

NANTUCKET, with its winter population of 3,000 and its estimated summer population of 10,000, has the three in one distinction, within this Commonwealth, of being an island, county and town. The town selectmen serve as board of health and county commissioners.

Although the island of Nantucket is about 40 miles out in the ocean, it has just experienced an epidemic of measles which would prove alarming to many mainland towns and cities.

Nantucket's isolation, however, completely failed to check the spread of this disease, the first case of which, so far as known, was brought from the mainland by a carrier to a school pupil in Nantucket, who came down with the disease during his first week of school attendance.

Up to May 7, 1915, but 8 cases of measles had been reported from Nantucket, — 4 in 1910 and 4 in 1911.

Between May 7, 1915, and July 13, 1915, 111 cases of measles had been reported by the board of health on the double postal cards for reporting infectious diseases to the State Department of Health.

Nantucket was visited by the State district health officer May 24, 25 and 26, 1915, and the first investigation was begun.

Conferences were held with the board of health, school committee, school principal, school superintendent and school physician, with the following results, — viz.: —

It was found that the schools had continued their regular sessions; that out of a total enrollment of school pupils, which, according to the annual report of the school superintendent for 1914, should have been 550, on May 24, 1915, the number of pupils enrolled was approximately 362, showing absentees to the number of 188. Not all of these absences, as will be shown later, were due to personal illness among pupils.

The second investigation by the State district health officer was made July 13 to 14, 1915.

At that time it was practically impossible to estimate with any degree of accuracy an exact census of school attendance, but through the courtesy and co-operation of the school superintendent the State district health officer is able to submit the following details, which are well worth noting: —

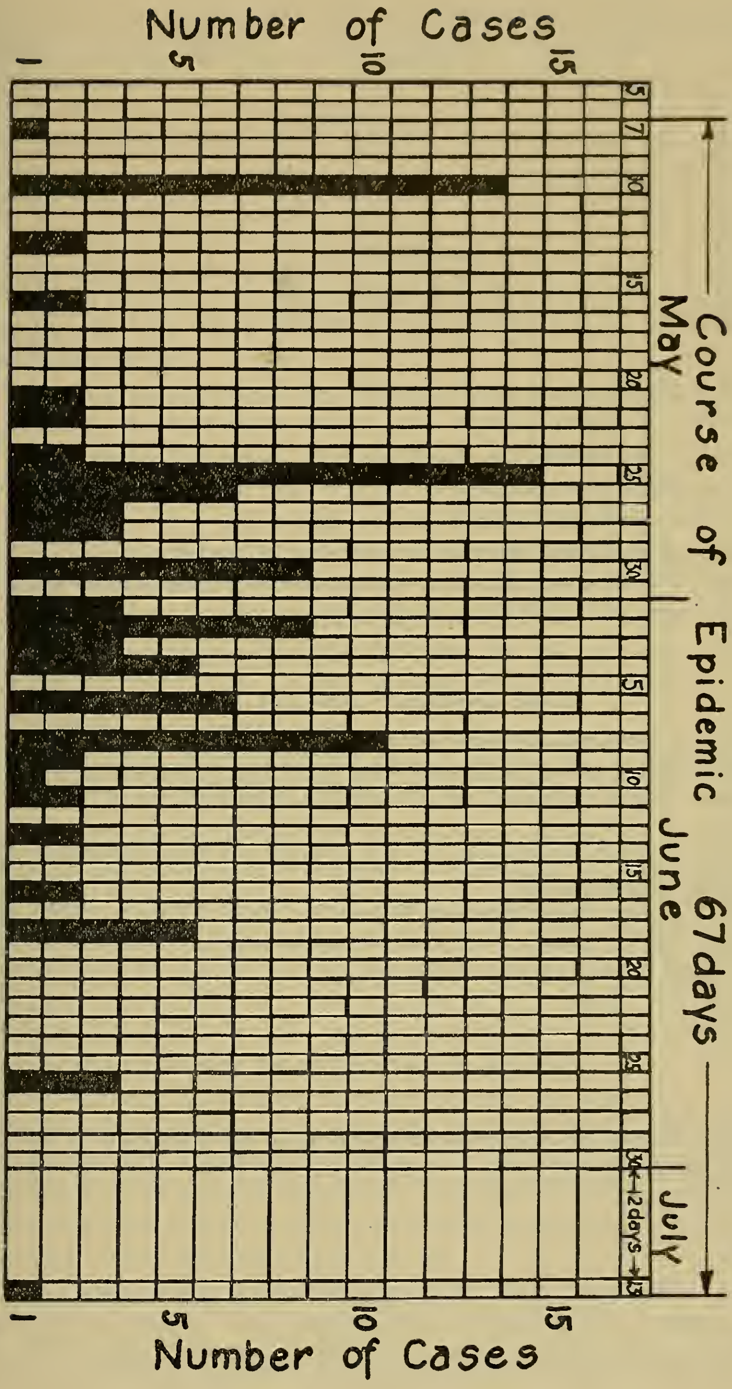
Number of Pupils reported upon by School Teachers, as directed by Superintendent of Schools.

Grades I. and II.: —		
Pupils absent with measles,	60	
Pupils absent, measles in family,	4	
Pupils absent, cause unknown,	7	
	—	71
Grades III. and IV.: —		
Pupils absent with measles,	17	
Pupils absent, measles in family,	3	
Pupils absent, cause unknown,	5	
	—	25
Grade V.: —		
Pupils absent with measles,	23	
Pupils absent, measles in family,	4	
	—	27
Grade VI.: —		
Pupils absent with measles,	4	
Pupils absent, measles in family,	7	
	—	11
Grade VII.: —		
Pupils absent with measles,	5	
	—	5
Grade VIII.: —		
Pupils absent with measles,	2	
Pupils absent, measles in family,	9	11
	—	—
Total,		150

Summary.

Total number of pupils reported absent with measles,	111	
Total number of pupils reported absent, measles in family,	27	
Total number of pupils reported absent, cause unknown,	12	
	—	150

On page 178 is a table of the detailed number of cases reported to the State Department of Health by the secretary of the board of health, on double postal cards, from May 7 to July 13, 1915, showing the incidence of the disease, its height, course and decline (see diagram, page 177).


Number of Cases
1
5
10
15
5
7
10
15
20
25
30
5
10
15
20
25
30
12days
13
May
June
July
Course of Epidemic 67days
1
5
10
15
Number of Cases

1915.	Number of Cases.
May 7,	1
10,	13
13,	2
16,	2
21,	2
22,	2
24,	2
25,	14
26,	6
27,	3
28,	3
30,	8
June 1,	3
2,	8
June 3,	3
4,	5
6,	6
8,	10
9,	2
10,	1
11,	2
13,	2
16,	2
18,	5
26,	3
July 13,	1
Total,	111

Among the number of cases reported there were 9 adults, ranging from eighteen to seventy-nine years of age, 8 males and 1 female, the latter a high school teacher.

Most of the adult cases were regarded as serious.

The only fatality, directly traceable to measles, was a child nine months old, who died from broncho-pneumonia.

CASE REPORTS. OFFICIAL RECORD.

Number of cases seen, attended and reported by 3 physicians,	98
Number of cases seen, attended and not reported by 4 physicians,	8
Number of cases supposedly not attended by physicians, but reported by parents,	13
Number of cases not attended or not reported by either physicians or parents, approximately,	30
Number of cases investigated by Warren B. Chase, secretary, board of health, said by parents or others in charge to have had measles with no physician in attendance and unreported,	22
Total,	171

Reported, 111; unreported, 60; total, 171.

According to records in the possession of the secretary of the board of health, 7 physicians were called to attend 106 cases, as follows: —

Dr. A,	60
Dr. B,	36
Dr. C,	2
	98

The above cases were reported to the board of health.

Dr. D,	3
Dr. E,	3
Dr. F,	1
Dr. G,	1
	8

The above cases were not reported to the board of health.

Conclusions.

It is reasonably safe to assume that the Nantucket epidemic of measles has run its course, and, fortunately indeed, with but one immediate fatality.

Up to the present time the epidemic has not resulted in the development of any secondary foci of this disease among the children of visiting families, which, of course, was to be looked for.

This epidemic, however, shows the silliness of failure to consult physicians in the early stages of measles, which are more likely to prove infectious than the later stages; the folly of indifferent nursing, lack of care, no prophylaxis; and a tendency toward letting such cases take care of themselves, together with a complete forgetfulness of the golden rule of isolation so far as other people's children are concerned, to say nothing about other members of the same family.

The fact that there has been but one death cannot be construed to mean that this epidemic has not been serious; the *sequelæ* tell the story.

This epidemic has, however, whether intentionally or not, resulted, so far as this generation of children is concerned, in conferring a variable period of immunity, which will serve to protect them until other generations of children come along; then, unless those who have profited by the lesson of this epidemic take heed, noting the late example, a repetition at the expense of the usual sufferers — the children themselves — will add another record to the measles history of Nantucket.

This epidemic also serves to point toward the need of a more efficient school inspection than generally prevails throughout the Commonwealth, *e.g.*, a school inspection that will include school hygiene, personal hygiene and the elementary principles of preventive medicine.

The lay notion that measles needs dark, stuffy rooms and blankets is wrong. Give the cases light and air.

The other notion, quite too prevalent, that if one child has the measles the others must also have it, exposes other children to the disease, which is absolutely criminal.

SUPPLEMENT.

The third and last investigation by the State district health officer was made July 27 and 28, 1915.

The collected report material up to that date, as prepared for this article, was submitted to the secretary of the board of health, school physician, town physician and others cognizant of the actual measles situation, for purposes of correction and comparison, with facts, figures and other data in their possession, and found to be correct and in exact accordance therewith.

PELLAGRA IN MASSACHUSETTS.[1]

WALTER H. BROWN, M.D., *Acting Epidemiologist.*

Pellagra is a modern medical sensation. Until a few years ago the report of a case was considered a curiosity. We had a vague idea that it was a disease confined to the poverty-stricken parts of southern Europe. Then came a rude awakening. As a result of the careful study of small groups of cases by Searcey in Alabama, and Merrill and Babcock in South Carolina in 1907, the attention of the medical profession was attracted to the disease. Evidence began to accumulate that the supposed freedom of the United States from this malady was a dream. At first the cases were confined to the south, but gradually reports came from all parts of the country. With these increasing numbers the matter became one of grave concern. Medical journals were filled with the subject; the newspapers featured it; conferences were held; commissions were appointed; and finally, the United States Public Health Service began an extensive investigation. The disillusionment was now complete. Pellagra was found to be a very common disease in our country. From the obscurity of a medical curiosity it has arisen to the dignity of an important public health problem.

The distribution of pellagra now becomes of more than historical interest. While it is true that it seems to prefer the tropical and the warmer parts of the temperate zones, cases are being reported from the cooler portions of the world. The countries around the Mediterranean have been the hardest hit. In this country, cases have been found in almost every State, with the largest numbers in the south. The high-water mark was reached in Italy in 1881, when it was estimated that there were 105,000 pellagrins. At the same time

---

[1] This is the first of two articles on pellagra. The second will appear in a future number of the bulletin.

Austria reported nearly 80,000. The data for the United States are incomplete, for the disease is only reportable in a few of the States. Goldberger estimated that we had 50,000 cases in 1914. The increasing prevalence in this State and the registration area of the United States can be noted by the rather incomplete table found below: —

Year.	Deaths in Massachusetts.	Deaths in United States Registration Area.
1910,	1	368
1911,	1	659
1912,	5	674
1913,	11	1,015
1914,	18	–[1]
Total,	36	2,716

[1] Figures not available.

While the aggregate of these deaths is not large, if we remember the lesson of Italy's thousands of cases, they will command our attention. Since the first of January, 1915, there have been reported 15 cases of pellagra in the various towns of this State. This does not nearly represent the actual number present. It has been a common experience that a large majority of the cases remain undiscovered unless special efforts are made to reach the public and the doctors. When practicing physicians realize the frequency of pellagra and the importance of its early recognition, we will doubtless have greater accuracy of diagnosis and reporting.

The earliest accurate accounts of pellagra were recorded by Spanish physicians in the first third of the eighteenth century. About twenty years later Italian observers described the same disease under the name of "alpine scurvy." In 1784 Emperor Joseph II. of Austria established the first hospital for the treatment of the disease. By the beginning of the nineteenth century pellagra was widely known in Europe. It spread rapidly, and showed a marked intensity accompanied by a high mortality. As noted above, little was known about it in this country until 1907. Now almost every State in the Union has its quota of cases. As early as 1862 Tyler recorded the first case in Massachusetts. Then comes a break in the reporting until 1910, when we hear from Fitzgerald, Dean, Lee and MacDonald. With the reported cases this year coming from such widely different parts of the State as Danvers (5), Lowell (3), Northampton (2), Holden (1), Worcester (1), Newton (1), Winchendon (1), Taunton (1), we are forced to realize the general distribution of pellagra in this Commonwealth. A number of the far-seeing States are taking active measures to prevent the spread of this dangerous disease.

The story of the search for the cause of pellagra is worth repeating. The multiplicity of theories reveals the uncertainty of the investigators. Naturally, with the discovery of the increasing prevalence of the disease came speculation as to the cause. The earliest, and perhaps the most widely accepted, is the great "spoiled corn" theory. Prevalent very early in the history of the disease, it was ably developed and defended by Lombroso. In brief, it insists that pellagra is an intoxication produced by poison developed in "spoiled corn" through the action of certain micro-organisms, in themselves harmless to man. This theory has been accepted by the Italian government, and upon it are based all of their extensive prophylactic measures. The debate upon this theory has been so heated that there are two distinct schools of thought, — "zeists" and "anti-zeists." Practically all of the American investigators reject this view of the disease.

The belief that the cause of the disease is a parasite has many advocates. Sambon has conducted some interesting and suggestive investigations along this line. He asserts that the parasite is transmitted by means of the Buffalo gnat. While this theory is worthy of attention, it is not justified by the epidemiological evidence.

One of the curiosities is the so-called "sunlight" theory. The supporters of this idea claim that there are poisons circulating in the blood that are only rendered harmful by the exposure of parts of the body to the rays of the sun. This is merely one of the queer results that arise in the study of any obscure disease.

The infectious theory is the one that requires the most careful consideration. If pellagra is an infectious disease it becomes at once one of the greatest menaces to the public health. American investigators have taken the lead in studying the question from this angle. The Thompson-McFadden Pellagra Commission has attacked this subject with unusual thoroughness. It is beyond the scope of this paper to discuss in detail the probabilities of the truth of the various theories. It will be of interest to quote one of the conclusions of the above-mentioned commission: "Pellagra is, in all probability, a specific infectious disease communicable from person to person by means at present unknown." It is of great importance that the truth of this conclusion be settled speedily.

Finally, the United States Public Health Service has declared, after several years of careful investigation, that pellagra is probably of dietetic origin. Of equal importance, they assert that it is *not* an infectious or contagious disease. They conclude that the disease is due to a fault in diet in which there is a disproportionately large amount of some vegetable proteins and a relatively small amount of animal and leguminous proteins. Further, they declare that pellagra does not occur in those individuals who consume a mixed, well-balanced and varied diet. On this basis they recommend the treatment of the disease. This view of the disease seems to be the most firmly established by the evidence. It is being generally accepted, and campaigns for the suppression of the disease are being conducted along this line.

Pellagra is a poverty disease. The majority of its victims come from that portion of society where life is one continual struggle for existence. In their constant efforts to get the bare necessities of life it is not surprising that they neither know nor observe the common laws of hygienic living. Consequently, their daily lives prepare a favorable soil for the action of such a disease as pellagra. While many cases are found in the so-called better grades of society, such individuals are usually eccentric in their habits of life.

Here, then, we have a newly discovered health problem of extraordinary importance. It demands the careful consideration of every thoughtful public health worker.

CHILDREN BETWEEN TWO AND SIX.[1]

"FALL RIVER."

THERE are no children between two and six on the sociological map.

There is the baby. We all know the baby, favorite stalking horse for every good cause under the sun. Beloved by us all, he is doubly dear when he ceases to be a live problem for the Public Health Nurse and becomes through early death a "significant consequence" or a "sensitive index" in the mouth of the platform orator.

Then there is the school child. Is there any one of us who has not heard of the school child? The sociologists have discovered a great deal about the school child in the last few years. They have discovered that he exists, for one thing. There are apparently a great many of him. It has been noticed that he does not always get enough to eat, and that he eats as a general proposition the wrong sort of food. It has been noticed that he does not get enough fresh air. It has been noticed that he does not get enough exercise. It has been noticed that he does not get enough recreation or play, and that as a general proposition he gets the wrong sort of recreation. It has also been noticed by a few observers that he doesn't get enough schooling, and that as a general proposition, what schooling he gets is the wrong sort of schooling. Under the glare of this publicity, the poor school child is apt to look sick. The sociologists tell us that he is sick, many of him, most of him, and that does not seem unreasonable if you will agree with the previous observations. The community has become greatly exercised about the school child, and doctors and nurses have been rushed to his assistance. The school nurse is in many communities as well thought of as the policeman. She has ceased to be a fad, she is an institution. A school child must have a school house, a school teacher, and a school nurse, because he is a school child. It has become obvious to a great many taxpayers, though not to all, that from six to sixteen, for the good of the State, citizens are entitled to free nursing service if they require it, and free medical advice. They are rather compelled to make use of their privileges, too.

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[1] Reprinted by permission from the Public Health Quarterly, Cleveland, O., July 15, 1915.

The community is almost feverishly interested in the infant. He also has a nurse of his own. He calls her his Welfare Nurse, or his Milk and Hygiene Nurse, or his Station Nurse, or his Clinic Nurse, or anything that is his. This nurse, you understand, is a proprietary article. She is the Infant Nurse. If she has ever seen a sick adult, she may as well forget it. She will henceforth deal with no one older than the age of two. Where the sympathies of the community are more eclectic, she will not be allowed to serve any patron over one year old.

The baby has his special nurse, the school child has his special nurse, the adult has a whole lot of special nurses for himself, alone. From the cradle to the grave, we stand guarded, for fear we should reach our destination ahead of time. Except from the age of two to six. Nobody loves us from two to six, nobody writes books about us, nobody puts us under the sociological microscope, nobody cares. It seems sad.

When asked to write an account of community child life between two and six years, I naturally looked up the topic "Child Welfare," in the local public library, and found as I have stated above. There are theoretically no children between infancy and six years old. I was forced to turn from learned literature. I repeated sternly to myself, "There must be children between two and six in Fall River at least, because there are school children in Fall River and there are babies in Fall River and one turns into the other somehow. They cannot be utterly unrelated." The main thing was to find out where these nondescript and seemingly unimportant little creatures were kept. Were they all so healthy that no nurses were ever called to their rescue? Was it so easy to rear a child from two to six that all the mothers in the community were capable of the task single handed and alone?

One thing I knew to start with. They did not figure largely on the death register. Some persons in the community stoutly affirm that few children die between two and six because they all but a few die under a year old. And a survey of the infant mortality in Fall River, just published, does show that out of over 800 consecutive births, only about 500 were left in Fall River at a year old, while a few more of these died promptly after reaching the age of one year. But these 300 odd infants did not all die. Many merely left town for terrestrial destinations. And while the infant mortality of Fall River is high and the infant exodus from Fall River is surprisingly large, the fact remains that every school house in Fall River is "filled to capacity," and motoring through the streets of Fall River outside of school hours is a dangerous occupation. I was going to call it a dangerous pastime, but if it is, the pastime belongs entirely to the children in the street, and the danger entirely to the nerves of the passengers in the car. I saw a tow-headed urchin of three years and a scarlet frock, stand directly in front of a seven-passenger touring car, yesterday, and state calmly, "You dasn't run over me." He was quite right. I dasn't.

Our infant death rate is high, and our school children are afflicted with many and grievous diseases, according to the school doctors. Were all sickly infants killed off in infancy, and were the remaining children robust until they began the study of the alphabet? This really seems to be the subject of this paper.

I asked a school teacher if she ever had children under six years. She was a primary school teacher. She said she tried not to. She said the legal age for entering school was five years, but the school teachers discouraged the practice of such early entrance, and no truant officer had been known to enforce attendance under six or seven. They might be in the kindergartens. Yes, but most of the children in Fall River did not go to kindergartens; for one thing there were not enough kindergartens to accommodate all children between two and six. Were they in the play grounds? The play leaders would know. Well, some did come to the play grounds, but it was hard to know what to do with such very young children. Babies were different, they could be kept in little swings, or baby carriages — yes, I know the feeling about babies. I was learning the feeling about children from two to six. I went to the local hospital. Were there children from two to six in the wards? Oh, yes, but they were such a nuisance, so active, and so unreasonable, and so noisy! Of course, they were being given good care, but I fancy it takes special aptitude to love to be a children's nurse. It was suggested with much more enthusiasm that I look into the crèche. The dear little babies looked so cute, and they were all asleep. Yes, I said I knew how babies looked, but I was not looking for babies. One little boy of four years old, in the children's ward, was lying in a plaster cast, with one leg tied up in the air exactly at right angle with his bed. It was an orthopedic case. I asked him if he wanted anything. I should, in his position, have wanted to murder the people who were keeping him there, but he was not revengeful. He whispered he would feel better if he could have a spotted dog with a curly tail to keep in his bed. I asked the doctor if it was necessary to torture such very little mites. He said that only between two and six were the bones supple enough to make such operations successful. I gathered that from his point of view the whole city of Fall River might be full of embryonic cripples, little children between two and six, who ought to have their backs and their legs and their arms, etc., straightened immediately. It would be too late for most of them when they were old enough to go to school and confront the school doctor. Their bones would have hardened. "We want them from two to six," said the doctor.

"And why don't you get them?" I asked. "Nobody else wants them."

Because they are too young to complain intelligently, of course too young to ask for treatment, and because the average parent, rich or poor, does not know when his child is in need of medical or surgical care, unless the need is very obvious. Orthopedic defects are usually far from noticeable to the untrained eye, at so young an age.

So at last I had found a place where many little children from two to six ought to be, a place where they were wanted. The children's ward. "Who had sent little Peter to have his leg tied up in the air?" Why, one of the district nurses. She was in the house taking care of a new baby when she happened to see Peter with his clothes off and noticed his back wasn't quite right. She told his mother to bring him up to the hospital to the children's clinic for examination. Who sent the rest of the children? The district nurse. And I noticed the ward was full.

Down I went to the District Nursing Office. I persuaded the superintendent to let me ask a few leading questions of the nurses waiting to go out on their cases for the day. I discovered that every one of the nurses had under their care children between two and six, because in Fall River we have not specialized nursing. All of our district nurses are general nurses. And the rest of this article will be really nothing more than a plea for general nursing in every community, made on behalf of the babies who are begging not to be abandoned on their second birthday by their best friend, the infant nurse. I speak in the name of the baby first, to touch your feelings, but also in the name of the overworked school doctor, the distracted school teacher, the discouraged physician specializing on orthopedic cases, most of them brought too late to give skill and devotion half a chance. I beg of you all to let the school nurse begin to watch over the school child before he enters the school, that he may arrive at school age with good eyes, good teeth, good ears, and a straight spine. Give the school child fresh air, let him eat if he is hungry, provide him with organized play and disorganized lessons if you desire, but give him, above all, a chance to begin his education in good physical condition. Between the ages of two and six there can be found the origin of many a malady now attributed to the devastating effect of too close application to the alphabet and multiplication table.

Give our scholars a school nurse, give our babies an infant nurse, but give our children from two to six a nurse also. And why not consolidate? Why not let Miss Brown, R. N., be a baby nurse until Peter reaches two years, and then turn into a school nurse, when Peter goes to school. She need not stop working in between. Let her, on the contrary, stick closely to Peter. It does not seem unreasonable. Peter's mother is not a brilliant woman, yet she took care of Peter when he was a baby, and she took care of him when he was three years old. She did not turn him over to a new mother when he had to be short coated, nor again when he put on long trousers. By the time Peter was a grown man, Peter's mother had gotten up quite an interest in Peter. Scientists tell us that mother love is greatly increased by proximity, and by personal care for the child. It is not all instinctive. It increases with practice. A nurse is a woman primarily, and as a woman, and incidentally a nurse who has received three years or more careful training in general nursing, she meets Peter the day he comes into the world. She has previously talked about Peter with his expectant mother, and wondered with her if it is going to be Peter or Mary. When she learns it turned out to be Peter, she is interested. Having known the family while it was getting ready for Peter, she is qualified to pass judgment upon Peter's likeness to his father, especially about the chin, you know, and also she is permitted to give a few decided opinions about the care Peter's mother seems to be getting, and upon her personal habits. She would listen to much family gossip while she bathes the baby, and if she cannot make out a perfect family history card at the end of ten visits for after care, then who can!

If Peter gets the whooping cough at one year eleven months old, shall Miss Brown, R. N., visit him zealously for four weeks, and then abandon him because he is two years old? Abandon Peter? Naturally not. He is her own baby. When is a baby not a baby? Why, never, to his mother or his nurse. He may become President of the United States, but his mother and his nurse remember how he looked the day he had his first bath, and the day he had his first ride in a perambulator. They see him still, in a white lace cap with pink ribbons, and they can admire him no more at the height of his powers, with a nation in applause, than they admired him on the day when he ate his first baked potato, or learned to lisp his own name. So why take Peter's nurse away from Peter when he is two years old? A new nurse may know more about ordinary two-year babies, but she doesn't know more about Peter or Peter's family. She didn't see the first tooth the day it came through! No, and Peter's mother may be civil to a new nurse, but she will never believe there was any sense in changing nurses when the first was doing so well. Adenoids may as well be removed before school age. Miss Brown, R. N., looks Peter over carefully every few weeks for signs of adenoids. He doesn't seem to enjoy his food? He looks thin. Yes, so he does. The children's clinic and the children's specialist for Peter, at once. The mother knows perfectly well that Miss Brown, R. N., loves Peter, and admires him. She has seen her love him for three years steady. So there can't be any interested suggestion in the advice. Besides, Miss Brown, R. N., is not a "regular nurse, always sticking her nose into everything and putting it down on a card." She does do regular nursing, yes, "but," says Peter's mother, "she comes in to see me because we are friends and she is fond of Peter."

It happens to be true. It will always happen to be true. If you will let Nurse Brown or Nurse Green or Nurse Sullivan have complete oversight over a mother and her baby for three or four years, and listen to her reports on that family every little while, you will perceive that at the end of that time every resource in the community is being used for the benefit of that family group, and that Nurse Brown does not intend to let anybody or anything interfere with the good health and happiness of the baby whom she has guarded so zealously for so long a time. An epidemic of whooping cough is an indefinite evil, to be deplored. It is a "wicked shame," because "little Peter may get it." The development of a play-ground in the neighborhood is "a desirable form of civic betterment." "It is going to be such a good place for little Peter to play in when he gets older, because he hasn't any yard, he lives upstairs." Civic problems, State laws, are all viewed in the light of their possible effect upon little Peter, little Susie, and baby Angelina.

Are the general Public Health Nurses trained in social service? We hope so; to a certain extent it is necessary that they should be; but we find that it is the need of the individual which awakens in the minds of our own district nurses a sense of the deficiencies of the community in particular and of our social organization in general.

I seem to be straying from my topic. But I am trying to show that after the nurse, acting with the above spirit, has watched over Peter up to the age he enters school, there can hardly be a chance that the school doctor on his first tour of inspection will find anything wrong with Peter. And suppose all the little Peters in the class had been watched over by Nurse Brown, R. N., up to the day they went to school — how many school children would have had to be turned over to the school nurse in the primary grade! I venture to think very few. When defects appear, eye strain is noted or a suspicious rash, to what nurse should little Peter be reported? To a new nurse, knowing nothing about his constitution, likely to be regarded with suspicion by his mother? No, indeed! Back to Miss Brown, R. N., his card should go, and he will be attended to! As a hen attends to her chickens so will Miss Brown attend to her own school children.

In Fall River this system is followed. The district nurses receive all school cards made out by the school doctors, where the parents are negligent. Therefore, each family in the community, already allotted to some district nurse, sees the same nurse coming in through the door in pursuit of a school child that it has formerly seen when it suffered from a broken leg, a new baby, or a case of typhoid. No matter what the need, it is always the same family friend dropping in to help out by giving care or in explaining the mysterious ways of school teachers and doctors and boards of health. The defect of this scheme is shown by my own experience. When I asked the nurses to tell what they knew about children from two to six, they found it hard to reply. They were so used to thinking in terms of personality, that they couldn't quite remember their patients by age classification. Peter was not an infant, or a school child, or a nondescript between two and six, he was just Peter. But out came the note-books, and upon reflection all cases were ready for rehearsal. There was an avalanche of information. I could give you a regular Sunday Supplement Questionaire, if it were desirable. The concensus of opinion was as follows: The greatest foe to children between two and six is whooping cough. Deaths from whooping cough begin as early as six months old, increasing for a time, then growing less as the children grow older; the number of cases not diminishing, but increasing and raging most viciously between two and six. The obvious fact is that little babies die of whooping cough and its kindred subsequent effects, while children a little older get the same subsequent effects, and sometimes die, but more often suffer from these effects all their long lives. The doctors do not seem to think death the greatest evil brought in the train of whooping cough, though mortality from this disease alone is pretty high in Fall River. They fear rather the diseases from the respiratory organs which follow whooping cough, and the effect upon the heart, etc. There is nothing done in Fall River, there is little done anywhere, to prevent the spread of whooping cough. The teachers have permission to send a child out of the school building if he seems to have whooping cough, but our children between two and six seldom try to enter school buildings, with or without. The school child is told to go home, but he usually wanders about the street spreading this truly serious plague. Every spring our healthy children catch this contagion and some of them, after six weeks or more, emerge from its clutches weaklings for the rest of their lives. I am putting this too strongly? The nurses do not think so. "You will remember that dear little Ostapow baby of mine," says nurse Brown. "You know he was absolutely perfect when he was born, and his mother took such good care of him, and fed him on the breast for nearly a year! I taught her how to cook oatmeal, and how to make whole wheat bread, and she bought a little ice chest for his milk, and at two years old he was the dearest thing! His mother was not able to speak a word of English, but she was so fond of her child that she would do just anything. And then that child got whooping cough, and now his lungs are affected and the doctor thinks there isn't much hope. Whoever gave that baby whooping cough has a lot to answer for!" You see it is the waste, the wanton waste of perfectly good children that is so appalling in the whooping cough problem, and whoever can devise a scheme for eradicating whooping cough will do more for our children between two and six than he may realize. Measles are a close second to whooping cough. The board of health does not placard the house where measles are known to exist but the disease is somewhat under control. Though it is by no means as well under control as diphtheria, which is hardly more than a negligible factor in the life of the infantile community of to-day, whooping cough is not placarded. A child with whooping cough is a usual sight and sound in any moving-picture house, any afternoon in the week, while all of our best shops display whooping coughers in the aisles annually between March and the close of the summer season.

Since we cannot at present eradicate whooping cough, but merely mitigate its consequences by instruction in the homes where it occurs, what shall we attack to ease the lives of our children from two to six? Well, bad feeding, perhaps. The feeding question under a year, in Fall River, is pretty well answered with our knowledge that most mothers feed their children on the breast, either entirely or partly, for nearly a year. Where they give them artificial food, they give them so many other handicaps, such as tuberculosis, syphilis, weak hearts, whisky, general debility, and a poor start from birth, that bad diet merely caps the climax, as it were. But when the infant reaches ten months or a year, the trouble begins. It is not trouble with the milk. Our milk supply is pretty good. All the reputable milk men are willing to deliver milk in glass bottles to the kitchen door of any family in town — no matter if the family has a kitchen door at the top of two flights of tenement stairs. Free milk can be had upon proper application to the district nurses, of course. It isn't milk that our children from two to six are bothered about. It is beer, it is whisky, it is gin, it is coffee, it is tea, and it is bad ice cream. "A hot drink," or a "sup out of the can," is such a delightful and indispensable part of a day's pleasure for some parents, that it is almost impossible to make them understand the need of total abstinence from two to six. Such children will drink anything, of course. As I write these words, my sister interrupts to tell me that her son, age two and a half years, has just taken a drink out of the kerosene can. I do not wish to imply that kerosene is our family tipple, I merely wish to point out that the powers of natural selection of wholesome diet are not fully developed between two and six years old.

School children eat all there is in sight, usually. Grown men eat all they want. Babies scream when not fed, and can hardly be cuffed into silence with impunity. But children from two to six take what is left. They have to. No special diet is prepared for them in the tenement kitchen. Fried steaks, fried potatoes, white bread, and hot coffee, and then perhaps a bit of pie, form a family diet varied occasionally by cabbage and onions. Or take your choice, and select for a warning the Italian family with spaghetti seven days a week. If the father of the family does not care for cereals, then the boy of three cannot have them. Fruit means bananas — usually green.

Now, any child who has survived infancy and whooping cough in good condition is pretty tough. He is apt to live along, somehow. But his bad diet has a disastrous effect on his bones, if not on his stomach, and if our nurses would concentrate a little more upon the dinner plate of the child under six years old, even at the risk of taking the eye off the milk bottle of the baby for a moment, I feel sure we would have less need for orthopedic surgery later on.

In Fall River we have not done much toward rectifying the feeding of children between two and six. We only know it should be rectified. The general standards of cooking and selecting food are so bad throughout the community from a dietetic point of view that it will be impossible to give three-year-old children proper food until the community mothers are taught the simple rudiments of wholesome and appetizing meals for the whole family. This is naturally work for the settlements and the visiting housekeepers, and it is slow work as all educational work is bound to be.

As is usually found to be true of all arbitrary divisions, infants between two and six suffer from the same community defects that the rest of us suffer from, though they may re-act in different fashion. Unquestionably, bad food between two and six is largely responsible for chronic stomach troubles later on, and only tortured sufferers from nervous dyspepsia can tell us what it means to have a digestive apparatus that will not work. The habit of eating bad food, and of craving bad food, is one easily formed in childhood, and not easily shaken off.

Briefly, then, we may state that our children under discussion should, in some unknown fashion, be protected from whooping cough and measles and bad diet. Failure to protect these children from these three plagues will result in sickly school children and inefficient adults.

We should add that even the most careful diet will not save all of these children from slight deformities of the bones. It should be the duty of the community to see that these deformities are sought for while they are still slight, and corrected while there is yet time. This search should be made between two and six, by the visiting nurses. All children suspected of any abnormality or defect, however slight, should be referred to the proper clinics or to the family physician, and the advice of the doctors should be followed at once. This is not done thoroughly in Fall River, or anywhere else as far as I can ascertain. The public is not yet convinced of the ultimate saving of expense which routine inspection of little children would bring about. But we are all getting educated together, the mother in the tenement and the director on the charitable board.

There is another phase of child life between two and six which should not be overlooked. My nephew, aged two and a half, escaped from his mother for a moment the other day. Out she ran, and I followed, only to find the boy holding a life-sized axe above his head. A log of wood lay near the door of the wood shed, and it was the evident intention of my nephew to split wood. He wore a white dress, and his expression was guileless as his clothes. He had done nothing for which he should be scolded. Other men split wood, why not he, at two and a half years old?

"Children from two to six ought never to be left alone a minute," said my wise sister decisively, as she sat down on the tool house steps and showed her small son how to throw corn to the chickens.

Now, it may be true. But if you are the house-mother, you have got to stay in the house, and if you are a child from two to six you ought to stay outdoors. The nurses say this is really a serious problem in the proper nurture of children between the age of the perambulator and the age of the school room. There is an institution called the "little mother," which has reached the ear of the sociologist. Personally, I don't think well of "little mothers." I was a "little mother" once, myself, and my sympathies are still with her rather than with her charges. But, judging from the same intimate point of view, I honestly think the charges would do better under a big mother with a less experimental attitude toward life. We have a worse institution than the little mother to cope with, however. You can find any cold day in winter as you go down the streets of the city, little white faces pressed mournfully against the window panes. They gaze wistfully out upon the world at large. They are the children between two and six. Their fathers and their mothers are out working by the day. A huge fire has been made in the kitchen stove, to heat the air of the kitchen and bedrooms, already foul from having been used for sleeping purposes and kept unventilated all night. Extra precautions are taken to fasten down all the windows very tightly, so that the child can't fall out, and the cold can't get in.

What does Peter do?

Well, he looks out of the window. Usually he doesn't try to play. He sits in the close air, and turns into a pale, anæmic child, bow-legged from bad diet rather than from forced exercise — mournful, ineffectual, cowed. Tuberculosis finds him a ready victim. But you quite misunderstand the situation if you are wasting any sympathy on Peter's mother, forced to leave poor little Peter all day! She prefers to work in the factory, rather than in the home, that is all. One brings in money. The other merely saves money brought in by the husband. The labor is about equal, and the amount contributed to the family support is as great either way. Peter's mother simply prefers factory labor, to equally hard labor in the home, that is all. She does not intend to manage on a small income. She hates to cook and sew. She can, with her earnings buy clothes and food, already made, and she does so. But she cannot buy health and strength for little Peter under this system, and in the name of our children between two and six, I implore those of you who influence public opinion to accept the testimony of our visiting nurses in a factory town, and stop sympathizing with the poor mother forced into the factory to buy food for her children. She does exist. Sometimes Peter is illegitimate, sometimes his father is in prison, sometimes he has run away; but where the family is normal, and the father is willing to work six days of the week, our nurses are quite frank in stating that there is no financial necessity for the mother of the household to work for wages, but a very great moral and physical necessity for her to work hard at her proper business — rearing little Peter as well and economically as possible.

This means that she must be educated in a sense of true values of life. It means that she must come in contact with persons who condemn her behavior instead of pitying her hard lot. Our nurses tell me that it is perfectly possible to reason with many such mothers, and that it is possible to prove to them conclusively that wage-earning for the house-mother is expensive at any price. Many a mother has been detached from mill life, and taught wiser expenditure of her husband's wages than ever she dreamed of before. But again, this is a matter of education, and education is expensive. The public is willing to educate the school children free of charge, but to educate the mother of the school child seems extravagant.

You may say that the mother had her share of education when she herself was a school child, but in these days of immigration that is untrue of over half the mothers in a community like ours. However, I gather the nurses are not despondent. They know what they want to do for the children between two and six, and why.

They know they are doing much of what they ought to do, and that some day they will have time enough to do more.

They have a modest program. They want to make all the homes in the city suitable residences for children between two and six. This would not make them unsuitable for the rest of the family. Then they want to have time enough, eyes enough, ears enough, first to visit all these little children frequently and to detect and isolate all cases of contagious disease before it has begun to spread throughout the community. Second, to visit all these little children often enough to detect all malformations and deformities in their earliest stages, and report their possible existence to the doctors. Mothers who are not professionally trained cannot usually detect these things, until they are serious. Mothers who are not ethically trained are apt to permit their own children to infect other children with whooping cough and measles at their own sweet will.

For these two contingencies, the personal inspection of the nurse will probably always be needed. But it is probably true that our mothers can be trained to provide all the rest of the care that children between two and six are likely to need.

These are the facts I have gathered together regarding our community child life at an early age. It is not an exhaustive study, but if it helps to prove that children between two and six do exist and are a definite menace to the well-being of the community, if neglected, this study is not entirely without value.

GOOD TEETH ESSENTIAL TO GOOD HEALTH.[1]

Recent Medical Discoveries prevent Dental Loss.

ACCORDING to the United States Public Health Service there will be a falling off in the sale of store teeth in the future, and plates and toothless gums will be seen less frequently than formerly. This is due to the epoch-making discovery of the cause and method of treating what is known to the scientist as pyorrhœa dentalis and alveolaris, and to the layman as Rigg's disease. This is a suppuration around the roots of the teeth and causes an inflammation which produces loosening and loss of the teeth. At one time or another practically everybody has Rigg's disease. It is caused by a minute single celled animal called the endamœba buccalis. This malevolent parasite does its work in combination with the pus-producing bacteria or germs. The skillful teamwork between these two destroys the delicate membrane which surrounds the roots of the teeth and causes them to fall out.

The necessity of good teeth in order to have good health has been recognized a long time, but the scientists' of our country have only recently worked out the relationship between decay of the teeth and Rigg's disease on the one hand, and rheumatism, serious heart disease and high blood pressure on the other. So firmly have these facts been proven that the modern up-to-date physician begins the treatment of such diseases by an inquiry into the condition of the teeth and their sockets. If these are found to be diseased, the condition is cured before the treatment goes further. The discovery of the cause of Rigg's disease is, therefore, of the very greatest importance.

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[1] Reprinted from Health News, United States Public Health Service.

Just as soon as the cause of Rigg's disease was found out the search for the cure began in earnest. It had been previously discovered that the use of ipecac would cure the diseases which are caused by infection of the intestine with endamœbæ. From this it was deduced that a similar treatment would cause the destruction of endamœbæ in the mouth. This was found to be the case, and emetin, the form of the drug used, is now administered by physicians for the cure and prevention of the disease. It sometimes takes a considerable time to get rid of all of the malignant germs in this way, but the results which have been obtained have been remarkably good. The treatment is both local and general.

In the matter of preventing mouth disease it is important that the mouth be cleaned several times a day, and that a dentist be visited frequently to remove tartar and the yellowish matter which accumulates along the inner edges of the teeth and between the teeth. This is particularly important in the case of children, because it has been found that many a child is apparently dull who is in reality suffering from a chronic poisoning produced by a mouth full of decaying teeth.

The number of sufferers from Rigg's disease in the United States is very large, and the United States Public Health Service is daily receiving inquiries as to the method of curing and preventing the disease.

FIELD NOTES.

Fitchburg, through one of its private organizations, the district nursing association, has begun an active campaign in the field of baby hygiene. The work will be supported entirely by individual contributions. Two milk stations will be established about July 1 in different sections of the city, — one in the French district and the other in the Italian district. Milk will be obtained from dairies approved by the city's milk inspector, and a small charge will be made to persons able to pay, while to poor families it will be distributed gratuitously. Two district nurses will have charge, and in addition to giving instruction to mothers of the value of clean milk for their babies they will give instruction in the preparation of milk formulæ under the direction of one or two physicians connected with the association. From this nucleus it is expected that a splendid work will evolve in the saving of babies' lives in this community.

That there is a dearth of public health nurses in Massachusetts is indicated by the experience of the Taunton board of health. The Taunton health board was supplied through Dr. Adam S. MacKnight, district health officer for the southeastern district, with a list of names of public health nurses, furnished by the State Health Department, for selection for the tuberculosis dispensary of Taunton. Not only has the Taunton board of health been unable to get one of these nurses but, in addition, they have attempted to obtain a competent nurse through the Instructive District Nursing Association. Their efforts have been, so far, unavailing. The public health nurse is, perhaps, the most recent arrival in the health field, and it is obvious that the supply is not sufficient, as yet, to meet the demand.

The board of health of Gardner has adopted a rule making obligatory the cleansing of premises after removal, recovery or death from contagious diseases. A woman has been employed by the board for this purpose, and her services will be paid for by the board in case of needy families, while families able to pay may employ the board of health scrub woman or have the work done satisfactorily to the board. The board has not considered it advisable at this time to discontinue the use of gaseous disinfection, although convinced of its inefficiency.

FOOD AND DRUGS.

The following tables present the results of the laboratory examinations of samples of food and drugs collected during the month of July, 1915: —

The cities and towns in which samples were collected were: Andover, Attleboro, Ayer, Barnstable, Beverly, Billerica, Blackstone, Boston, Bourne, Braintree, Brockton, Brookline, Buzzards Bay, Cambridge, Chelmsford, Chelsea, Concord, Danvers, Dracut, Fall River, Fitchburg, Harwich, Hull, Lowell, Lynn, Lynnfield, Malden, Mansfield, Marblehead, Marlborough, Medford, Millbury, Milford, Nantucket, Natick, Newburyport, North Attleborough, Oak Bluffs, Peabody, Plymouth, Quincy, Revere, Salisbury, Saugus, Siasconset, Swampscott, Taunton, Uxbridge, Vineyard Haven, Waltham, Wareham and Woburn.

SUMMARY OF ANALYSES.

ARTICLES EXAMINED.	Number found to be of Good Quality.	Number adulterated or varying from the Legal Standard.	Total.
Cocoa,	2	–	2
Condensed milk,	6	2	8
Confectionery,	2	–	2
Cream,	19	1	20
Drugs,	83	14	97
Fish: —			
Salmon, [1]	1	1	2
Flavoring extracts: —			
Lemon,	20	19	39
Vanilla,	4	2	6
Wintergreen,	1	–	1
Ice cream,	21	1	22
Jams and jellies,	3	–	3
Lime juice,	6	–	6
Maple sugar,	9	1	10
Maple syrup,	2	–	2
Milk,	448	264	712
Pickles,	1	–	1
Salad dressing,	2	–	2
Soft drinks: —			
Orangeade,	–	1	1
Spice,	2	–	2
Syrups,	1	–	1
Totals,	633	306	939

[1] Taken from cold storage.

PROSECUTION FOR VIOLATIONS OF THE LAW RELATING TO FOOD AND DRUGS.

Seven convictions were secured during the month of July, 1915, for the sale of adulterated food, and for violation of the slaughtering law, as follows: —

NAME OF DEFENDANT.	Place.	Character of Article sold or Nature of Offence.
Ephram Marquis,	Blackstone,	Milk (total solids, 11.07). [1]
Mathew J. Bennett,	Billerica,	Milk (total solids, 10.08). [1,2]
John Kerepka,	Dracut,	Milk (total solids, 10.42). [1]
John Rego,	Plymouth,	Milk (total solids, 9.26). [1]
Herman Hoerman,	North Attleborough,	Milk (total solids, 10.60). [1,2]
Samuel Friedman,	Attleboro,	Milk (total solids, 11.50). [3]
Max Greenfield,	Lenox,	Slaughtering without inspector present.

[1] Watered. [2] Appealed. [3] Skimmed, not marked.

Fines imposed, $352.35.

Cold Storage of Food.

Articles in Cold Storage condemned upon Physical Examinations as Unfit for Food.

Date.	Articles.	Weight (Pounds).	Reasons.	Disposition.
July 1, 1915	Beef trimmings,	1,915	Decomposed, . .	Rendered.
July 2, 1915	Beef hearts, .	586	Decomposed, . .	Rendered.
July 2, 1915	Roosters, . .	323	Decomposed, . .	Rendered.
July 6, 1915	Turkeys, . .	370	Decomposed, . .	Rendered.
July 7, 1915	Beef chucks, .	12	Decomposed, . .	Rendered.
July 8, 1915	Beef trimmings,	1,305	Decomposed, . .	Rendered.
July 8, 1915	Chickens, . .	110	Decomposed, . .	Rendered.
July 12, 1915	Turkey, . .	29	Decomposed, . .	Rendered.
July 12, 1915	Pork butts, .	50	Decomposed, . .	Rendered.
July 12, 1915	Lamb fries, .	135	Decomposed, . .	Rendered.
July 13, 1915	Butter, . .	240	Sour and mouldy, . .	Rendered.
July 15, 1915	Salmon, . .	1,250	Decomposed and sour, .	Rendered.
July 16, 1915	Flounders, .	4,550	Sour, ...	Lobster bait.
July 16, 1915	Mackerel, . .	200	Tainted, . . .	Lobster bait.
July 19, 1915	Fish, . .	3,250	Decomposed, . .	Rendered.
July 20, 1915	Butter, . .	311½	Decomposed, . .	Rendered.
July 20, 1915	Butter, . .	356½	Decomposed, . .	Rendered.
July 22, 1915	Salmon, . .	773	Decomposed, . .	Rendered.
July 26, 1915	Scup, . .	170	Tainted and sour, . .	Rendered.
July 26, 1915	Butterfish, .	530	Dried and soiled, . .	Rendered.
July 28, 1915	Moose meat, .	60	Dried, soiled and tainted,	Incinerated.
July 29, 1915	Butter, . .	21	Sour and mouldy, .	Rendered.
July 30, 1915	Chickens, . .	38	Decomposed, . .	Denatured.
July 30, 1915	Fowl, . .	6	Decomposed, . .	Denatured.
July 31, 1915	Poultry, . .	69	Decomposed, . .	Denatured.
Total, .	. . . .	16,660		

Articles confiscated under Food Laws.

Date.	Articles.	Weight (Pounds).	Owner.	Address.
July 13, 1915	Fish in pickle, .	1,900	Leonard Treat, . .	East Boston.
July 23, 1915	Fish in pickle, .	8,400	Eugene H. Rock, . .	Chelsea.
July 30, 1915	Fish in pickle, .	12,600	Eugene H. Rock, . .	Chelsea.

Articles placed in Cold Storage during the Months of April, May and June, 1915.

Articles.	Cases.	Dozens.	Packages.	Pounds.
Eggs, case, ...	696,822	20,904,680	–	–
Eggs, broken, ...	–	–	2,823	789,690
Butter, ...	–	–	227,267	14,228,565½
Poultry, ...	–	–	4,122	2,184,163
Game, ...	–	271⅓	244	2.225
Meat, fresh, ...	–	–	8,513	8,303,538½
Meat products, fresh (except in process of manufacture), .	–	–	1,386	2,200,980
Fish, fresh food, . . .	–	–	13,492	7,540,856
Totals, ...	696,822	20,904,951⅓	257,847	35,250,018

Butter and Eggs held in Cold Storage July 1, 1915.

ARTICLES.	Cases.	Dozens.	Packages.	Pounds.
Eggs, case,	7,388,970	22,166,910	–	–
Eggs, broken,	–	–	2,128	72,869
Butter,	–	–	202,789	12,150,428½
Totals,	7,388,970	22,166,910	204,917	12,223,297½

List of Adulterated or Improperly Labeled Foods, etc., for July, 1915.

Number of Sample.	Character of Sample.	Name of Manufacturer, Wholesaler or Producer.	Results of Analyses.
26168	Condensed milk,	Columbus Brand, Locate-Triulzi Condensed Milk Company, Locate-Triulzi, Italy.	Below Massachusetts milk standard when diluted according to directions.
26815	Condensed milk,	Snow Brand, Wisconsin Condensed Milk Company, Burlington, Wis.	Below Massachusetts milk standard when diluted according to directions.
26713	Lemon extract,	Capital Brand, Standard Grocery Company,	Deficient in lemon oil; incorrectly labeled.
26712	Lemon extract,	Purity Drug Company, Lawrence,	Deficient in lemon oil; incorrectly labeled.
26714	Lemon extract,	Harvard Compound Lemon and Citral Flavor, Segal Bros., Boston.	Deficient in lemon oil; incorrectly labeled.
q15870	Lemon extract,	J. P. Connolly Company, Milford,	Deficient in lemon oil, incorrectly labeled.
26737	Lemon extract,	Acme Brand, W. J. Leonard, Brockton,	Deficient in lemon oil; incorrectly labeled.
1787–T	Lemon extract,	Reliable Specialty Company,	Deficient in lemon oil; incorrectly labeled.
1785–T	Vanilla extract,	Reliable Specialty Company,	An alcoholic solution of vanillin; incorrectly labeled.
q15869	Vanilla extract,	J. P. Connolly Company, Milford,	An alcoholic solution of vanillin; incorrectly labeled.
27998	Orangeade,	Blue Label Brand, Boston & Lowell Bottling Company, Boston.	Preserved with benzoic acid.
1979–T	Milk,	John Kelpa, Dracut,	Solids, 11.04 per cent.; fat, 2.90 per cent.; watered.
1983–T			Solids, 10.42 per cent.; fat, 3.10 per cent.; watered.
1985–T			Solids, 10.86 per cent.; fat, 3.20 per cent.; watered.
1989–T			Solids, 11.40 per cent.; fat, 3.70 per cent.; watered.
1991–T			Solids, 11.36 per cent.; fat, 3.60 per cent.; watered.
1993–T			Solids, 11.32 per cent.; fat, 3.70 per cent.; watered.
1995–T			Solids, 11.56 per cent.; fat, 3.70 per cent.; watered.

List of Adulterated or Improperly Labeled Foods, etc., for July, 1915 — *Con.*

Number of Sample.	Character of Sample.	Name of Manufacturer, Wholesaler or Producer.	Results of Analyses.
1615–T	Milk,	Frank Reed, Waltham,	Solids, 9.64 per cent.; fat, 3.20 per cent.; watered.
1617–T			Solids, 7.24 per cent.; fat, 1.70 per cent.; watered.
1619–T			Solids, 9.40 per cent.; fat, 2.90 per cent.; watered.
1621–T			Solids, 8.84 per cent.; fat, 2.50 per cent.; watered.
1623–T			Solids, 9.30 per cent.; fat, 3.00 per cent.; watered.
2776–A	Milk,	Henry Dezonia, Plymouth,	Solids, 10.00 per cent.; fat, 3.00 per cent.; watered.
2778–A			Solids, 9.90 per cent.; fat, 3.00 per cent.; watered.
2782–A	Milk,	John Rego, Plymouth,	Solids, 10.24 per cent.; fat, 3.05 per cent.; watered.
2784–A			Solids, 10.04 per cent.; fat, 2.85 per cent.; watered.
2786–A			Solids, 9.26 per cent.; fat, 3.85 per cent.; watered.
16525	Milk,	Louis Montenary, Plymouth,	Solids, 11.56 per cent.; fat, 3.60 per cent.; watered.
16526			Solids, 11.78 per cent.; fat, 4.50 per cent.; watered.
28090	Milk,	Walter Dobra, North Attleborough,	Solids, 12.30 per cent.; fat, 4.90 per cent.; watered.
28091	Milk,	Herman Hoerman, North Attleborough,	Solids, 10.60 per cent.; fat, 3.05 per cent.; watered.
28092			Solids, 10.89 per cent.; fat, 3.20 per cent.; watered.
28093			Solids, 10.89 per cent.; fat, 3.20 per cent.; watered.
28094			Solids, 11.08 per cent.; fat, 3.20 per cent.; watered.
28095			Solids, 10.40 per cent.; fat, 3.20 per cent.; watered.
3096–A	Milk,	Nathaniel Wing, Bourne,	Solids, 10.80 per cent.; fat, 3.50 per cent.; watered.

28124	Milk,	B. J. Goss, Ayer,	Solids, 10.94 per cent.; fat, 3.30 per cent.; watered.
28125			Solids, 11.10 per cent.; fat, 3.40 per cent.; watered.
28126			Solids, 11.06 per cent.; fat, 3.50 per cent.; watered.
28127			Solids, 11.10 per cent.; fat, 3.55 per cent.; watered.
28128			Solids, 11.06 per cent.; fat, 3.50 per cent.; watered.
28129			Solids, 10.98 per cent.; fat, 3.30 per cent.; watered.
28130			Solids, 11.14 per cent.; fat, 3.30 per cent.; watered.
28131			Solids, 11.08 per cent.; fat, 3.50 per cent.; watered.
2794–A	Milk,	Walter N. Schroeder, Plymouth,	Solids, 11.34 per cent.; fat, 2.55 per cent.; protein, 3.17 per cent.; skimmed milk.

REPORT UPON THE WORK OF THE BACTERIOLOGICAL LABORATORY FOR THE MONTH OF JULY, 1915.

The following gives the total number of biological products and diagnostic outfits distributed by the bacteriological laboratory of the State Department of Health during the month of July, 1915: —

Biological Products.

Diphtheria antitoxin: —	
2,000 units (special for the Boston City Hospital),	92 bottles.
6,000 units (special for the Boston City Hospital),	28 bottles.
12,000 units (special for the Boston City Hospital),	198 bottles.
3,000 units,	2,211 bottles.
1,500 units,	644 bottles.
750 units,	448 bottles.
Smallpox vaccine,	6,706 tubes.
Typhoid vaccine,	2,049 ampoules.
Antimeningitis serum,	141 bottles.
Silver nitrate solution,	172 droppers.

Diagnostic Outfits.

Culture tubes,	497
Sputum bottles,	327
Widal outfits,	207
Bile outfits,	63

The following gives the total number of bacteriological examinations made in the laboratory of the State Department of Health during the month of July, 1915: —

	Number of Examinations.	Diagnosis.		Release.	
		Positive.	Negative.	Positive.	Negative.
Diphtheria,	376	58	145	58	115

	Number of Examinations.	Positive.	Negative.	*Atypical.
Tuberculosis,	223	77	146	
*Typhoid fever (Widal test),	194	26	159	9
Typhoid fever (culture test),	27	1	26	
*Paratyphoid fever,	6	–	6	–
Malaria,	3	1	2	
Miscellaneous,	73			

Total number of examinations made, 902.

RETURNS OF DISEASES.

Cases of Diseases declared by the State Department of Health to be Dangerous to the Public Health.

[Under the provisions of section 52 of chapter 75 of the Revised Laws.]

DISEASE.	Week ending —					
	July 3.	July 10.	July 17.	July 24.	July 31.	Total.
Anterior poliomyelitis,	–	2	2	1	3	8
Anthrax,	1	1	–	–	–	2
Cerebro-spinal meningitis,	4	2	3	4	2	15
Chicken pox,	37	43	35	17	16	148
Diphtheria,	115	118	138	86	140	597
Dog bite (requiring antirabic treatment),	7	5	9	4	3	28
Dysentery,	–	1	–	8	5	14
German measles,	6	10	7	5	–	28
Infectious diseases of the eye: —						
(*a*) Ophthalmia neonatorum,	49	54	48	49	41	241
(*b*) Trachoma,	–	–	1	1	–	2
(*c*) Suppurative conjunctivitis,	–	1	–	9	6	16
Malaria,	9	7	1	5	5	27
Measles,	715	439	398	202	178	1,932
Mumps,	33	29	24	18	16	120
Pellagra,	2	4	2	1	4	13
Rabies,	–	–	–	–	1	1
Scarlet fever,	124	103	106	75	51	459
Septic sore throat,	4	2	–	8	5	19
Smallpox,	1	–	–	–	2	3
Tetanus,	1	1	1	1	–	4
Tuberculosis, pulmonary (or not classified),	190	148	160	147	144	789
Tuberculosis, other forms,	15	18	21	17	15	86
Typhoid fever,	16	29	46	34	54	179
Whooping cough,	117	120	155	102	139	633

RETURNS OF DEATHS.

Deaths from Diseases declared by the State Department of Health to be Dangerous to the Public Health.

[Under the provisions of chapter 210, Acts of 1913.]

DISEASE.	Week ending —					
	July 3.	July 10.	July 17.	July 24.	July 31.	Total.
Anterior poliomyelitis,	–	–	2	–	–	2
Anthrax,	–	1	–	–	–	1
Cerebro-spinal meningitis,	3	2	1	4	1	11
Diphtheria,	7	9	6	9	11	42
Dysentery,	–	–	–	–	2	2
Measles,	3	3	7	–	2	15
Pellagra,	1	2	1	–	–	4
Scarlet fever,	2	4	3	1	–	10
Septic sore throat,	–	1	–	2	1	4
Tetanus,	–	1	–	–	1	2
Tuberculosis, pulmonary (or not classified),	64	53	62	63	58	300
Tuberculosis, other forms,	13	20	11	18	13	75
Typhoid fever,	2	4	9	1	5	21
Whooping cough,	3	5	9	2	9	28

WEEKLY RETURNS OF DEATHS FROM DISEASES DECLARED BY THE STATE DEPARTMENT OF HEALTH TO BE DANGEROUS TO THE PUBLIC HEALTH IN CITIES AND TOWNS IN MASSACHUSETTS.

[Under the provisions of chapter 210, Acts of 1913.]

In all cases where the name of a community is not mentioned it signifies that no deaths from these diseases have been reported to this office for the period covered by the table.

Week ending July 3, 1915.

CITIES AND TOWNS.	Population, Census for 1910.	Diphtheria.	Measles.	Scarlet Fever.	Tuberculosis, Pulmonary (or not classified).	Tuberculosis, Other Forms.	Typhoid Fever.	Whooping Cough.
Boston,	686,092	2	–	1[1]	14[2]	4[3]	–	–
Worcester,	145,986	–	–	–	3	1	–	1
Fall River,	119,295	–	–	–	5	–	–	–
Lowell,	106,294	–	–	–	3	–	–	1
Cambridge,	104,839	–	–	–	5	1	–	–
New Bedford,	96,652	–	–	–	3	1	–	–
Lynn,	89,336	–	–	–	1	1	–	–
Springfield,	88,926	–	1	–	2	1	–	–
Lawrence,	85,892	1	–	–	3	1	–	–
Somerville,	77,236	–	–	–	1	–	–	1
Holyoke,	57,730	–	–	–	2	–	–	–
Brockton,	56,878	2	–	–	–	–	–	–
Malden,	44,404	–	1	–	–	–	–	–
Salem,	43,697	–	1	–	1	1	–	–
Newton,	39,806	–	–	–	1	–	–	–
Fitchburg,	37,826	1	–	1	1	–	–	–
Taunton,	34,259	–	–	–	1	2	–	–
Chelsea,	32,452	–	–	–	1	–	–	–
Pittsfield,	32,121	–	–	–	1	–	–	–
Waltham,	27,834	–	–	–	2	–	–	–
North Adams,	22,019	–	–	–	2	–	–	–
Leominster,	17,580	–	–	–	1	–	–	–
Westfield,	16,044	–	–	–	3[3]	–	–	–
Woburn,	15,308	–	–	–	1	–	–	–
Gardner,	14,699	–	–	–	–	–	1	–
Clinton,	13,075	–	–	–	1	–	–	–
Watertown,	12,875	–	–	–	1	–	–	–
Milton,	7,924	–	–	–	1	–	–	–
Reading,	5,818	–	–	–	1	–	–	–
Holbrook,	2,816	1	–	–	–	–	–	–
Auburn,	2,420	–	–	–	1	–	–	–
Ashburnham,	2,107	–	–	–	–	–	1	–
Freetown,	1,471	–	–	–	1	–	–	–
North Reading,	1,259	–	–	–	1	–	–	–
Totals,	–	7	3	2	64	13	2	3

In addition to the above, 1 death occurred from cerebro-spinal meningitis in Boston and 2 in Arlington; and 1 death from pellagra in Worcester.

[1] One nonresident.

[2] Three nonresidents.

[3] Two nonresidents.

Week ending July 10, 1915.

CITIES AND TOWNS.	Population, Census for 1910.	Diphtheria.	Measles.	Scarlet Fever.	Tuberculosis, Pulmonary (or not classified).	Tuberculosis, Other Forms.	Typhoid Fever.	Whooping Cough.
Boston, ...	686,092	5[1]	–	2[2]	14[1]	5[1]	3[2]	2
Worcester, ...	145,986	–	–	–	2	3	–	1
Fall River, ...	119,295	–	–	–	1	–	–	–
Lowell, ...	106,294	–	–	–	2	–	–	–
Cambridge, ...	104,839	–	1	–	2	1	–	–
New Bedford, ...	96,652	–	–	–	3	1	–	–
Lynn, ...	89,336	–	–	–	2	2	–	–
Lawrence, ...	85,892	1	–	–	2	1	–	–
Holyoke, ...	57,730	–	–	–	1	–	–	–
Malden, ...	44,404	–	–	–	2	2	–	–
Haverhill, ...	44,115	2	–	–	3	–	–	1
Salem, ...	43,697	–	2	–	1	–	–	1
Newton, ...	39,806	–	–	–	2	–	–	–
Fitchburg, ...	37,826	–	–	2	2	–	–	–
Taunton, ...	34,259	–	–	–	1	–	–	–
Everett, ...	33,484	–	–	–	1	–	–	–
Chicopee, ...	25,401	–	–	–	1	–	–	–
Medford, ...	23,150	–	–	–	–	1	–	–
Northampton, ...	19,431	–	–	–	3	–	–	–
Westfield, ...	16,044	–	–	–	1[2]	–	–	–
Webster, ...	11,509	–	–	–	–	1	–	–
Danvers, ...	9,407	–	–	–	2	–	–	–
Middleborough, ...	8,214	–	–	–	1	–	–	–
Braintree, ...	8,066	–	–	–	1	–	–	–
Norwood, ...	8,014	–	–	–	1	–	–	–
Bridgewater, ...	7,688	–	–	–	–	2	–	–
Amherst, ...	5,112	–	–	–	1	–	–	–
Ludlow, ...	4,948	–	–	–	–	–	1	–
Canton, ...	4,797	1	–	–	–	–	–	–
Provincetown, ...	4,369	–	–	–	–	1	–	–
Douglas, ...	2,152	–	–	–	1	–	–	–
Totals, ...	–	9	3	4	52	20	4	5

In addition to the above, 1 death occurred from cerebro-spinal meningitis in Chelsea and 1 in Lynn, 1 death from anthrax and 1 from septic sore throat in Boston, 1 death from pellagra in Lowell and 1 in Worcester, also 1 death from tetanus in Worcester.

[1] Two nonresidents.

[2] One nonresident.

Week ending July 17, 1915.

CITIES AND TOWNS.	Population, Census for 1910.	Diphtheria.	Measles.	Scarlet Fever.	Tuberculosis, Pulmonary (or not classified).	Tuberculosis, Other Forms.	Typhoid Fever.	Whooping Cough.
Boston, ...	686,092	4	–	1	23[1]	6[1]	2[1]	2
Worcester, ...	145,986	–	–	–	2	1	1	–
Fall River, ...	119,295	–	–	–	2	–	1	–
Lowell, ...	106,294	–	–	–	4	2	1	–
Cambridge, ...	104,839	–	–	–	2	–	–	–
New Bedford, . . .	96,652	–	–	–	3	–	–	–
Springfield, . . .	88,926	1	–	–	1	–	–	–
Lawrence, ...	85,892	1	–	–	5	–	–	–
Brockton, ...	56,878	–	–	–	2	–	–	–
Malden, ...	44,404	–	–	–	1	1	–	–
Haverhill, ...	44,115	–	–	–	1	–	–	–
Salem, ...	43,697	–	–	–	1	–	–	–
Newton, ...	39,806	–	6	2	–	–	–	6
Fitchburg, ...	37,826	–	–	–	1	–	–	–
Taunton, ...	34,259	–	–	–	1	–	–	–
Pittsfield, ...	32,121	–	–	–	1	–	–	–
Waltham, ...	27,834	–	1	–	1	–	–	–
Medford, ...	23,150	–	–	–	–	–	–	1
North Adams, . . .	22,019	–	–	–	–	–	1	–
Northampton, . . .	19,431	–	–	–	1	–	1	–
Peabody, ...	15,721	–	–	–	2	–	–	–
Melrose, ...	15,715	–	–	–	1	–	–	–
Clinton, ...	13,075	–	–	–	–	1	–	–
Palmer, ...	8,610	–	–	–	1	–	–	–
Braintree, ...	8,066	–	–	–	–	–	1	–
Bridgewater, . . .	7,688	–	–	–	–	–	1	–
Montague, ...	6,866	–	–	–	1	–	–	–
Lexington, ...	4,918	–	–	–	2	–	–	–
Barnstable, . . .	4,676	–	–	–	1	–	–	–
Upton, ...	2,071	–	–	–	1	–	–	–
North Reading, . . .	1,059	–	–	–	1	–	–	–
Totals, ...	–	6	7	3	62	11	9	9

In addition to the above, 1 death occurred from anterior poliomyelitis in Worcester and 1 in Newton, also 1 death from pellagra in Newton, and 1 death from cerebro-spinal meningitis in Lawrence.

[1] One nonresident.

Week ending July 24, 1915.

CITIES AND TOWNS.	Population, Census for 1910.	Diphtheria.	Measles.	Scarlet Fever.	Tuberculosis, Pulmonary (or not classified).	Tuberculosis, Other Forms.	Typhoid Fever.	Whooping Cough.
Boston,	686,092	2[1]	–	1	26[1]	8[2]	1	1
Worcester,	145,986	1	–	–	9	3	–	–
Fall River,	119,295	–	–	–	1	–	–	–
Lowell,	106,294	–	–	–	2	–	–	–
Cambridge,	104,839	–	–	–	2	2	–	–
New Bedford,	96,652	1	–	–	2	1	–	–
Lynn,	89,336	–	–	–	2	–	–	–
Springfield,	88,926	–	–	–	1	–	–	–
Lawrence,	85,892	3	–	–	–	1	–	–
Fitchburg,	37,826	–	–	–	1	–	–	–
Taunton,	34,259	–	–	–	1	–	–	1
Pittsfield,	32,121	–	–	–	1	–	–	–
Waltham,	27,834	–	–	–	1	2	–	–
North Adams,	22,019	–	–	–	1	–	–	–
Westfield,	16,044	–	–	–	4[3]	–	–	–
Melrose,	15,715	–	–	–	2	–	–	–
Clinton,	13,075	–	–	–	1	–	–	–
Adams,	13,026	–	–	–	1	–	–	–
Framingham,	12,948	–	–	–	1	–	–	–
North Andover,	5,529	1	–	–	–	–	–	–
Dracut,	3,461	–	–	–	2	1	–	–
Barre,	2,957	–	–	–	2	–	–	–
Rehoboth,	2,001	1	–	–	–	–	–	–
Totals,	–	9	–	1	63	18	1	2

In addition to the above, 1 death occurred from cerebro-spinal meningitis in Everett, 1 in Holyoke and 2 in Boston (1 nonresident), 1 death from septic sore throat in Woburn and 1 in Barnstable.

[1] One nonresident.

[2] Two nonresidents.

[3] Three nonresidents.

Week ending July 31, 1915.

CITIES AND TOWNS.	Population, Census for 1910.	Diphtheria.	Measles.	Scarlet Fever.	Tuberculosis, Pulmonary (or not classified).	Tuberculosis, Other Forms.	Typhoid Fever.	Whooping Cough.
Boston,	686,092	5[1]	–	–	18	6[2]	–	6
Worcester,	145,986	–	–	–	4	1	–	–
Fall River,	119,295	–	–	–	2	–	4	–
Lowell,	106,294	–	–	–	2	–	1	–
Cambridge,	104,839	–	–	–	4	1	–	–
New Bedford,	96,652	–	–	–	3	–	–	–
Lynn,	89,336	1	–	–	1	–	–	–
Springfield,	88,926	–	–	–	1	1	–	–
Lawrence,	85,892	1	–	–	2	1	–	–
Somerville,	77,236	–	–	–	3	–	–	–
Holyoke,	57,730	–	–	–	1	–	–	–
Brockton,	56,878	–	–	–	1	–	–	–
Malden,	44,404	–	1	–	–	–	–	–
Haverhill,	44,115	–	–	–	1	–	–	–
Salem,	43,697	–	–	–	–	–	–	1
Newton,	39,806	–	–	–	1	–	–	–
Fitchburg,	37,826	1	–	–	1	–	–	1
Taunton,	34,259	–	1	–	1	–	–	–
Everett,	33,484	–	–	–	–	1	–	–
Pittsfield,	32,121	–	–	–	3	–	–	–
Waltham,	27,834	1	–	–	–	–	–	–
Medford,	23,150	–	–	–	–	–	–	1
Westfield,	16,044	–	–	–	2[2]	–	–	–
Peabody,	15,721	–	–	–	–	–	–	–
Winthrop,	10,132	–	–	–	1	2	–	–
North Attleborough,	9,562	–	–	–	1	–	–	–
West Springfield,	9,224	–	–	–	1	–	–	–
Braintree,	8,066	–	–	–	1	–	–	–
Norwood,	8,014	–	–	–	1	–	–	–
Blackstone,	5,648	–	–	–	1	–	–	–
Dracut,	3,641	–	–	–	1	–	–	–
Hatfield,	1,986	1	–	–	–	–	–	–
Leyden,	363	1	–	–	–	–	–	–
Totals,	–	11	2	–	58	13	5	9

In addition to the above, 1 death occurred from cerebro-spinal meningitis in Boston, 2 from dysentery in Fall River, 1 from tetanus in Lowell, and 1 from septic sore throat in Haverhill.

[1] One nonresident.

[2] Two nonresidents.

MASSACHUSETTS STATE DEPARTMENT OF HEALTH.

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PUBLIC HEALTH BULLETIN

ISSUED MONTHLY

BY THE

STATE DEPARTMENT OF HEALTH

OF MASSACHUSETTS

SEPTEMBER, 1915

Vol. 2, No. 8

ALLAN J. McLAUGHLIN, M.D., *Commissioner*

"THE COMMON HEALTH OF THE COMMONWEALTH"

Entered as Second-class Matter Oct. 26, 1914, at the Post Office at Boston, Mass., under the Act of Aug. 24, 1912

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Approved by
The State Board of Publication.

SYPHILIS AS A PUBLIC HEALTH PROBLEM.

Allan J. McLaughlin, M.D., *Commissioner of Health.*

IN view of the limited time at my disposal I shall confine my remarks on venereal disease to syphilis alone. Syphilis has been a scourge of the race from very remote times. We have a distinct record in medical literature for over four hundred years. During the sixteenth, seventeenth, eighteenth and nineteenth centuries it had been studied by thousands of physicians and research workers without revealing the true cause of the disease.

In the twentieth century a new era dawned and the story of laboratory achievement in syphilis in the past decade reads like a fairy tale.

In 1903 Metchnikoff and Roux successfully transmitted syphilis to the lower animals.

In 1905 Schaudinn discovered the cause of the disease, — the treponema pallida.

In 1906 Wassermann, Neisser and Bruck gave us the Wassermann reaction, which enables us to detect even those cases without external symptoms.

In 1910 Ehrlich gave to the world salvarsan, a specific destroyer of the treponema.

In 1911 Noguchi grew the treponema pallida in pure culture, outside the body, and produced luetin of great diagnostic aid in very obscure cases.

In 1913 Noguchi demonstrated treponema pallida in the brain of patients with general paresis, and in the cord of tabetic patients.

In spite of this exact knowledge of the etiology, prevention and cure of syphilis we are not able to say that this scourge is being reduced. One glaring defect must be corrected if only partially. Statistics are lacking, and they are no less necessary in this disease than in others if an intelligent campaign is to be conducted against it. Because of our lack of statistics of venereal diseases we are unable to say definitely whether these diseases are increasing or decreasing. I do not believe that any one is rash enough to say that they are decreasing.

The importance of syphilis as a public health problem is a sealed book. Almost never reported and frequently unrecognized, it takes its yearly toll of lives from every age and station. The mortality reports do not tell the whole story. Hidden away under a dozen technical titles are thousands of deaths that should be charged to the account of syphilis. It seems perfectly clear that we have overlooked the real significance of this great group of deaths. We need to be awakened to the fact that syphilis is one of *the* most pressing public health problems of the time.

This does not complete the picture. It has an important economic side. The syphilitic helps to fill our State institutions. This infection increases the number of the blind, the insane and the paupers. From the report of the State Board of Insanity we learned that 8.37 per cent. of primary admissions to the institutions under their charge in 1914 was due to syphilis. When we reflect that this Board was compelled to spend over $4,500,000 to equip and maintain its hospitals and schools, we can easily calculate the saving in dollars and cents if this disease were eradicated.

In order to eradicate a disease like syphilis or prevent its spread we must know its cause, its modes of transmission, and have some effective or specific remedy for the destruction of the infection in the human body. This is true of other diseases than syphilis. Malaria has been greatly reduced, and in certain sections eradicated, by the application of our knowledge of its cause, its modes of transmission and the remedy — quinine — which destroys the malarial parasites in the human body. We have in syphilis exact knowledge of its cause, its modes of transmission, and in salvarsan we have a specific remedy comparable with quinine in malaria which destroys the parasites in the human body.

Why, then, do we not reduce and attempt to eradicate syphilis as we would malaria in the same degree of prevalence? In spite of our knowledge of the disease we can never hope to attack it as we would plague, cholera, malaria or any other disease which does not brand the sufferer with a social stigma. We must do what we can, recognizing that the desire for secrecy must be respected.

There are several reasons, more or less valid, why we have failed to treat syphilis as a public health problem: —

1. There are no reliable statistics of the prevalence of the disease.
2. It is looked upon as a social disgrace to contract syphilis, and desire for concealment often causes the patient to neglect proper treatment or to fall into the hands of quacks and charlatans.
3. Among the poor and those in moderate circumstances the cost of salvarsan is often prohibitive.

What attitude should the State Department of Health assume towards this great problem of syphilis?

1. The disease should be reportable in a modified way.

2. Wassermann tests should be made free of charge by the State upon requests of physicians.

3. Salvarsan should be furnished free by the State to physicians for cases reported by number which have been found positive in the State Wassermann Laboratory.

Reporting of disease is exacted for two reasons: first, to give knowledge of and control over cases in an infectious stage; and secondly, for statistical information. Health officers can never expect to handle syphilis as an ordinary contagious disease. Placarding houses, quarantining cases, and other measures involving publicity, are unthinkable in a disease involving social disgrace. No experienced health officer who hopes for results is fool enough to attack syphilis in this way. The only sensible reason for desiring reports of syphilis is the need of statistics of the disease.

For this reason the reporting of syphilis, giving patients' names, should not be required, and the reporting by number should depend upon voluntary co-operation rather than compulsion.

The request of sanitarians to have cases of syphilis reported is not prompted by a desire to exercise quarantine powers over the individual, but rather to secure statistical information which will aid us in combating the disease. It is, therefore, unnecessary to give the name and address, but the reporting physician can report by number, giving all other interesting data.

The Wassermann Laboratory of the State Department of Health commenced work June 1, 1915, and we are now examining over 1,000 specimens each month. The record is as follows: —

MONTH.	Number of Specimens.
June,	631
July,	986
August,	1,036
September 1 to 17,	598

I believe that whenever a physician reports the data of a case of syphilis, omitting the name and address, and submits a specimen of blood which is found positive in our laboratory, the State should send him the salvarsan free with which to treat the case. The number, or other distinguishing mark sent in by the physician in lieu of the name of the patient, should be replaced by a serial number given by the

State Department of Health, and the physician then requested to make future reports or references under the serial number.

Some of our larger hospitals and dispensaries are doing splendid work in destroying the infection in the carrier of syphilis. Many other hospitals and dispensaries should pursue a more liberal policy. These other hospitals now refuse to admit syphilis in the early stages, although they admit aortitis, aneurism, locomotor ataxia and other diseases which are really syphilis in a later stage.

As a compensation salvarsan should be furnished free to hospitals and dispensaries. The time to eradicate the infection of syphilis is in the early stage. The general public must be educated in the appalling results of neglected syphilis, and dispensaries, hospitals and private physicians should be encouraged and assisted in treating the early cases, without allowing them to become cases of locomotor ataxia, general paralysis, heart disease or apoplexy.

In conclusion, just a word in answer to certain arguments which have been advanced against treating syphilis as a public health problem.

It is said that to advertise the marvelous effect of salvarsan, and to place it within the reach of the poor, is to put a premium upon vice and to absolve the syphilitic from the just punishment of his sins.

As health officers let us be practical and consider syphilis as a public health problem, leaving the academic discussion of its moral and social aspects to others. We may relieve the unfortunate sufferer from the punishment of his own misdeeds, but we are also preventing this punishment from falling upon women, children and other innocent victims.

Thousands of cases are acquired innocently from syphilitics, and our plain duty is to prevent these infections by eliminating the carriers of the disease without regard to their social or moral status.

Thousands of prisoners and inmates of Federal, State and municipal institutions are discharged each year, and these are turned loose without much regard to their being carriers of disease. In Massachusetts I believe that every inmate of a public institution should be tested for syphilis, and not discharged from that institution until he or she has been properly treated and shown to be no longer capable of infecting others.

As a sanitarian and practitioner of preventive medicine I desire to accentuate especially the necessity of early treatment in syphilis. The cardinal principle of our preventive campaign must be proper treatment in the early stages. In the first and second stages of syphilis the spirochætes are more easily reached and destroyed by salvarsan; hence the chances of complete cure are vastly better than if treatment is delayed.

The important point in early treatment from the health officer's point of view is that the infection is destroyed, and open sores and lesions which are practically certain to cause other cases are prevented.

SECOND ANNUAL NEW ENGLAND CONFERENCE ON TUBERCULOSIS.

THE Second Annual Conference on Tuberculosis for New England will be held in Springfield, Mass., Oct. 22 and 23, 1915. The program has been arranged under the auspices of the National Association for the Study and Prevention of Tuberculosis, and promises to be one of unusual interest. It is believed that the attendance at the conference will be exceptionally large, and inasmuch as many of the practical aspects of the tuberculosis problem are now actively before both the State and local authorities, the State Department of Health would like to take this occasion to point out to all of the tuberculosis dispensary officials, officials of local tuberculosis hospitals, and all other public officials whose work is concerned with tuberculosis, the practical value of attendance at this conference.

The program is already well filled and is divided into the following topics: "Programs of Anti-Tuberculosis Work for Communities of Varying Population;" "Industry and Tuberculosis;" "Methods of Anti-Tuberculosis Work;" and "The Diagnosis of Incipient Cases of Pulmonary Tuberculosis."

Several officials of the national organization, and many other authorities of national reputation on anti-tuberculosis work, will be present at this meeting, but the general plan of the conference is to give the individual, practical workers the greatest possible opportunity for exchanging their own opinions. Accordingly, a considerable portion of the time will be allotted to open discussion.

WHOOPING COUGH.

THE following circular relative to whooping cough has been issued by the Board of Health of Provincetown: —

WHOOPING COUGH DON'TS.

DON'T SPREAD — the disease. Prevent it by isolating the patient.
DON'T FORGET — that the patient is a source of infection until the spasmodic cough is over.
DON'T FORGET — that an incubation period of 16 days must elapse before symptoms of the cough may be considered as having passed.
DON'T FORGET — that patients may continue to spread infection for 6 weeks after apparent recovery.
DON'T FORGET — that Whooping Cough should be reported.
DON'T FORGET — that houses should be placarded.
DON'T FORGET — that patients should be isolated.
DON'T FORGET — that isolation need not include strict confinement to a room.
DON'T FORGET — that patients do better out of doors, and if permitted to take the air they must avoid contact with other persons.
DON'T FORGET — that patients must not go to school, theatre, church, public assemblies, nor ride in street cars or public conveyances.
DON'T FORGET — that children when out of doors should be accompanied by intelligent caretakers as a protection to others.
DON'T FORGET — that the safest course is to avoid infection.
DON'T FAIL — to suggest that children with Whooping Cough, who are given their liberty, should be plainly labelled with a red cross, or a yellow flag, conspicuously displayed on their clothing, to warn others.
DON'T FORGET — that children under 5 require the greatest protection and care.
DON'T FORGET — to seek medical advice.
DON'T ALLOW — dogs, cats, or other domestic animals to be about the patient.
DON'T FORGET — that the control of Whooping Cough is in the hands of the public itself.
DON'T FORGET — to impress the public of the dangerous nature of this infection.
DON'T FORGET — that the disease is contagious both before and after the Whoop.
DON'T FORGET — that mild cases of the disease without the characteristic Whoop, spread the disease.
DON'T OVERLOOK — the fact that Whooping Cough is quite common in adults as well as children.

DON'T FORGET — to notify all friends of the family that your child has Whooping Cough.

DON'T ALLOW — the nurse, or whoever is in charge of the child, to mingle with other children or to go near any children in any home, park, or public place.

DON'T FORGET — to keep the child away from Sunday School, stores and other places where children congregate, until the cough has entirely disappeared.

DON'T FORGET — that if the child is by accident in the company of other children and has a coughing spell, to cover the mouth and nose with a paper napkin, or handkerchief, and burn or wash this as soon as possible.

DON'T FORGET — to do to other mother's children as you would have those children's mothers do unto you.

Issued by Board of Health.

John A. Cook,
Norman F. Somes,
S. A. Bennett,
Board of Health of Provincetown.

SCALLOPS.

SCALLOPS have been used for food for many years, and since 1872 scallop fishing has been an established industry in certain parts of this State, which has greatly increased during recent years. In 1906 the Massachusetts Commission of Fisheries and Game was instructed by the General Court to make a report upon the industry, and in 1910 the commission issued a very complete report, giving a detailed history of the rise of the industry and the laws regarding it, the life history of the scallop, the method of catching the scallop and the practice of "soaking." As the courts have decided that the practice of adding water to oysters was a violation of the provisions of the food law, it seemed that the soaking of scallops was an analogous act, and means should be taken to stop the practice. As there is much interstate trade in scallops, the Department communicated with the Federal authorities to ascertain whether or not some co-operative movement could be undertaken by both departments. As the result of the conferences it was decided to visit the fishing grounds and obtain samples of known purity in order to establish analytical constants by means of which the pure and adulterated samples could be distinguished. Mr. Clarence E. Marsh was, therefore, designated to represent the Massachusetts State Department of Health in this investigation, and either alone or in company with Mr. Arthur L. Sullivan, chief of the Boston Food and Drug Inspection

Laboratory, United States Department of Agriculture, made several visits to the Cape and to Nantucket, obtaining samples which were divided with the Federal authorities. These samples were subjected to chemical analysis, as a result of which methods were devised to detect the addition of water in scallops.

A short description of the method of soaking may be of interest. After the scallops are brought to the shanties they are opened, and the "eye" or edible part is thrown into a 7-gallon wooden keg. When there are about 4½ gallons in the keg a bucket of fresh water is added, and after a few hours the keg is filled with water and the cover nailed on. When the keg is received by the dealer he finds it full of scallops. The scallop fishermen do not make any secret of this, for they do not believe there is any law to stop them. One man who was seen adding water to his scallops said, "The pure food law can't touch us because we add nothing but water," and another said, "Nothing sanitary about this business. We don't care where we get the water as long as it swells the scallops." In one instance the scallops were soaked in a polluted stream, colon bacilli being found in the water by the bacteriologist of this Department.

The methods of detecting water in scallops are simple and rapid. Soaked scallops usually contain a milky fluid, while unsoaked ones have almost no liquid. If a scallop is rubbed in the prism of an Abbe refractometer, and the refraction of the juice taken, unsoaked scallops will give a reading at 25° C. of 1.38 plus on the scale, while soaked ones give a reading from 1.34 to 1.36. This is a rapid and easy test, each sample requiring less than a minute. All samples reading 1.38 are considered good, and those reading lower are tested further. Experiments have shown that soaking lowers the percentage of proteins and solids. The normal figures are 19 to 24 per cent. for solids and 14 to 16 per cent. for proteins. Soaking lowers these figures to 10 or 16 per cent. for solids and 9 or 11 per cent. for proteins.

During the course of the experiments samples were collected from various fish markets in Boston and vicinity, and about one-half of the scallops were found to be soaked. One adulterated sample came from New York, and the case was turned over to the United States authorities, and others were traced to dealers on the scallop grounds of this State, who were warned to stop the practice.

Owing to the fact that the season was nearly over at the completion of the experimental work a systematic attempt to stop the practice of "soaking" could not be made, but the food and drug division proposes, as soon as the season opens, to start a vigorous campaign for the purpose of arresting the activities of those fishermen and dealers who sell alleged scallops containing from 30 to 40 per cent. of added water.

OPINION OF THE ATTORNEY-GENERAL AS TO THE REPORTING OF CASES OF TUBERCULOSIS.

THE COMMONWEALTH OF MASSACHUSETTS,
DEPARTMENT OF THE ATTORNEY-GENERAL,
BOSTON, Aug. 12, 1915.

ALLAN J. MCLAUGHLIN, M.D., *Commissioner of Health.*

DEAR SIR: — I beg to acknowledge the receipt of your letter in which you submit to me the following questions for my opinion: —

1. Whether cases of tuberculosis recognized as "continuing cases" once reported to the local board of health and by the local board of health immediately to the State Board of Health are required to be reported a second time, in the event of their receiving treatment in a State sanatorium; in other words, whether the original notice to the local board of health and by the local board of health to the State Board of Health is sufficient for the compliance of the laws so far as the notification requirement to the State Board of Health is concerned.
2. Whether a physician after once reporting a case of tuberculosis to the board of health of the town of which the patient is resident, in the event of the patient leaving the town for awhile, is obliged under the provisions of law when the patient returns to the town, provided the patient continues under the care of the same physician, to report the case again to the local board of health, and the said local board again obliged to report the case to the State Board of Health.

R. L., c. 75, section 57, which is referred to in your communication, was repealed by St. 1902, c. 213; and St. 1902, c. 213, was amended by St. 1907, c. 386, and further amended by St. 1909, c. 380, which states the law as it at present exists. St. 1909, c. 380, amends St. 1902, c. 213, section 1, so as to read as follows: —

Reasonable expenses incurred by the board of health of a city or town or by the commonwealth in making the provision required by law for persons infected with smallpox or other disease dangerous to the public health shall be paid by such person or his parents if he or they be able to pay, otherwise by the city or town in which he has a legal settlement, upon the approval of the bill by the board of health of such city or town or by the state board of charity; and such settlements shall be determined by the overseers of the poor, and by the state board of charity in cases cared for by the commonwealth. If the person has no settlement, such expense shall be paid by the commonwealth, upon the approval of bills therefor by the state board of charity. In all cases of persons having settlements, a written notice sent within the time required in the case of aid given to paupers, shall be sent by the board of health, or by

> the officer or board having the powers of a board of health in the city or town where the person is sick, to the board of health, or to the officer or board having the powers of a board of health in the city or town in which such person has a settlement, who shall forthwith transmit a copy thereof to the overseers of the poor of the place of settlement. In case the person has no settlement, such notice shall be given to the state board of health, in accordance with the provisions of section fifty-two of chapter seventy-five of the Revised Laws, and also in any case liable to be maintained by the commonwealth when public aid has been rendered to such sick person, a written notice shall be sent to the state board of charity, containing such information as will show that the person named therein is a proper charge to the commonwealth, and reimbursement shall be made for the reasonable expenses incurred within five days next before such notice is mailed, and thereafter until such sick person is removed under the provisions of chapter three hundred and ninety-five of the acts of the year nineteen hundred and four, or is able to be so removed without endangering his or the public health.

I assume that tuberculosis is a disease dangerous to the public health within the meaning of the R. L., c. 75, section 52, and St. 1909, c. 380. Said chapter 380 makes it clear that the Commonwealth is to reimburse the cities and towns until the sick person is removed, under the provisions of St. 1904, or "is able to be so removed without endangering his or the public health."

St. 1904, c. 395, was amended by St. 1909, c. 391, so as to read as follows: —

> The state board of charity may, if found expedient, remove any person who is infected with a disease dangerous to the public health, and who is maintained or liable to be maintained by the commonwealth, to any hospital provided for state paupers, or may provide such place of reception for such person as is judged best for his accommodation and the safety of the public, which place shall be subject to the regulations of the board, and shall have the same authority to remove such persons thereto as is conferred upon boards of health by the provisions of section thirty-six of chapter seventy-five of the Revised Laws, as amended by chapter three hundred and sixty-five of the acts of the year nineteen hundred and six.

St. 1909, c. 380, is very clear with the exception of the provision, "or is able to be so removed without endangering his or the public health." Obviously, it was not the intent of the Legislature by this provision that the State Board of Charity should elect whether to remove the patient, under the provisions of St. 1909, c. 391, and thereby determine the liability of the Commonwealth. It cannot be that, because the State Board of Charity finds a patient in a condition that prohibits his removal and later neglects to remove the patient when his condition permits, the liability of the Commonwealth to reimburse the city or town terminates with its neglect. It is my view that the provision, "or is able to be so removed without endangering his or the public health," refers to the condition of the sick person at the time when the danger of infection or contagion is at end. The result is, in my opinion, that after the proper notices have been sent to the State Department of Health and State Board of Charity, the Commonwealth is liable to reimburse the city or town for the reasonable expenses incurred by the board of health of the city or town in making the provision required by law for persons infected with diseases dangerous to the public health, until the sick person is removed under the provisions of said St. 1909, c. 391, or the danger of infection or contagion is at end.

Where a person afflicted with the disease of tuberculosis goes to a State sanatorium for treatment, after the proper notices have been given to the State Department of Health and the State Board of Charity, and then subsequently is discharged from the State sanatorium and returns to his place of domicile, I am of the opinion that the local board of health is not required to give further notice to the State Department of Health unless the patient has been discharged as cured or in such a condition that at the time of his discharge he was not a source of contagion or infection. Where a person leaves the place of his domicile temporarily for business, pleasure or health he does not lose his domicile in such place; and it would follow that ordinarily in cases of this kind that you refer to, the patient in the State sanatorium still retains his domicile in the city or town where he had his abode at the time he entered the State sanatorium, and there is no more necessity, in my judgment, of a notice to the State Board of Health upon his return from the State sanatorium than upon his return from a week's absence from the place of his abode on business or pleasure.

My reasons as to the answer to your first question apply to the second question, and, in my judgment, the question must be answered in the negative. There appears to be no reason why the physician must notify the local board of health in a case such as you describe, any more than there would be to require a physician to notify the local board of health of finding a case of tuberculosis on each visit to his patient.

I am aware that the Hon. Dana Malone, a predecessor in this office, on Jan. 8, 1910, rendered an opinion to the superintendent of the State Adult Poor, that where a patient infected with tuberculosis absconded from the State Infirmary and returned to the place from which he had been sent to the State Infirmary, the Commonwealth was not responsible unless a new notice was sent to the State Board of Charity. The facts in that case were substantially different from the facts stated in your request for an opinion, and I do not intend by this opinion to intimate in any way that my view of the law upon the facts upon which Mr. Malone rendered his opinion would be other than he there expressed.

Very truly yours,

HENRY C. ATTWILL,
Attorney-General.

The excellent article entitled "Early Diagnosis of Pulmonary Tuberculosis in Adults and in Children," which appeared in the July Public Health Bulletin, was from the pen of Dr. John B. Hawes, 2d, Secretary, Trustees of Hospitals for Consumptives, Boston, Mass.

FOOD AND DRUGS.

The following tables present the results of the laboratory examinations of samples of food and drugs collected during the month of August, 1915: —

The cities and towns in which samples were collected were: Acushnet, Ashburnham, Attleboro, Barnstable, Boston, Bourne, Chelmsford, Chelsea, Clinton, Dedham, Dover, Edgartown, Everett, Fairhaven, Fall River, Fitchburg, Framingham, Franklin, Freetown, Gardner, Gloucester, Great Barrington, Haverhill, Hudson, Hull, Ipswich, Lancaster, Lawrence, Lee, Lenox, Leominster, Lowell, Marlborough, Methuen, Milford, Nantucket, Natick, New Bedford, Newburyport, North Attleborough, Oak Bluffs, Pittsfield, Plymouth, Provincetown, Sandwich, Sterling, Stockbridge, Swampscott, Templeton, Tisbury, Waltham, Watertown, Wellesley, Woburn and Yarmouth.

SUMMARY OF ANALYSES.

ARTICLES EXAMINED.	Number found to be of Good Quality.	Number adulterated or varying from the Legal Standard.	Total.
Coffee,	1	–	1
Condensed milk,	3	–	3
Confectionery,	3	–	3
Cream,	14	–	14
Drugs,	36	7	43
Fish,	1	–	1
Fish paste,	1	–	1
Flavoring extract: —			
Pineapple,	1	–	1
Ice cream,	85	8	93
Meat product: —			
Sausages,	1	–	1
Milk,	336	141	477
Oil of sweet almonds,	3	–	3
Olive oil,	2	–	2
Root beer extract,	2	–	2
Soft drinks,	2	1	3
Totals,	491	157	648

PROSECUTIONS FOR VIOLATIONS OF THE LAWS RELATING TO FOOD AND DRUGS.

Sixteen convictions were secured during the month of August, 1915, for the sale of adulterated food, and for violation of the slaughtering laws, as follows: —

NAME OF DEFENDANT.	Place.	Character of Article sold or Nature of Offence.
Henry Ardezzoni,	Plymouth,	Milk (total solids, 9.90).[1]
Brown Caldwell,	Stockbridge,	Milk (total solids, 10.95).[2]
Louis Montenari,	Plymouth,	Milk (total solids, 10.50).[1]
John C. Moynihan,	Newburyport,	Milk (total solids, 11.10).[1]
Frank Reed,	Waltham,	Milk (total solids, 8.84).[1]
Nathaniel Wing,	Bourne,	Milk (total solids, 10.80).[1]
Henry Todd,	Nantucket,	Ice cream (contained 4.30 per cent. fat).
Henry Todd,	Nantucket,	Ice cream (contained 2.80 per cent. fat).
Frank S. Perry,	Attleboro,	Obstruction.[3]
Frank S. Perry,	Attleboro,	Obstruction.[3]
Frank S. Perry,	Attleboro,	Assault and battery.[3]
Frank S. Perry,	Attleboro,	Cruelty to horse.[3]
Daniel E. Clifford,	Ware,	Selling unstamped meat.
J. Howard Eames,	Woburn,	Allowing illegal use of inspector's stamp.
Charles Nichols,	Woburn,	Slaughtering without inspector present.
Charles Nichols,	Woburn,	Selling unstamped meat.

[1] Watered.
[2] Skimmed.
[3] Appealed.

Fines imposed, $576.

Cold Storage of Food.

Articles in Cold Storage condemned upon Physical Examination as Unfit for Food.

Date.	Articles.	Weight (Pounds).	Reasons.	Disposition.
Aug. 10, 1915	Veal,	35	Immature,	Rendered.
Aug. 11, 1915	Sardine herring,	490	Soiled, broken and dried out.	Rendered.
Aug. 12, 1915	Mixed poultry,	223	Decomposed,	Rendered.
Aug. 12, 1915	Venison,	36	Decomposed,	Rendered.
Aug. 12, 1915	Ducks,	34	Dried out and soiled,	Rendered.
Aug. 12, 1915	Ducks,	45	Rancid,	Rendered.
Aug. 12, 1915	Chickens,	331	Decomposed,	Rendered.
Aug. 12, 1915	Fowl,	160	Decomposed,	Rendered.
Aug. 12, 1915	Fowl,	78	Dried out,	Rendered.
Aug. 14, 1915	Sardine herring,	70	Soiled and dried out,	Rendered.
Aug. 14, 1915	Miscellaneous fish,	225	Soiled and dried out,	Rendered.
Aug. 14, 1915	Scup,	35	Soiled and dried out,	Rendered.
Aug. 18, 1915	Geese,	406	Rancid,	Rendered.
Aug. 18, 1915	Ducks,	110	Rancid,	Rendered.
Aug. 18, 1915	Turkeys,	329	Dried out,	Rendered.
Aug. 18, 1915	Turkeys,	5,801	Dried out and decomposed.	Rendered.
Aug. 18, 1915	Chickens,	20	Decomposed,	Rendered.
Aug. 18, 1915	Pork,	47	Dried out,	Rendered.
Aug. 18, 1915	Beef livers,	137	Sour,	Rendered.
Aug. 20, 1915	Pigs kidneys,	48	Fermented and decomposed.	Incinerated.
Aug. 21, 1915	Sardine herring,	1,750	Old and dried out,	Buried at sea.
Aug. 23, 1915	Calves livers,	49	Sour,	Rendered.
Aug. 23, 1915	Chickens,	81	Decomposed,	Rendered.
Aug. 23, 1915	Turkeys,	93	Decomposed,	Incinerated.
Aug. 24, 1915	Pigeons,	3	Decomposed,	Rendered.
Aug. 24, 1915	Chickens,	5	Decomposed,	Rendered.
Aug. 25, 1915	Beef tops,	409	Decomposed,	Incinerated.
Aug. 28, 1915	Beef hearts,	175	Decomposed,	Rendered.
Aug. 30, 1915	Boned beef,	456	Decomposed,	Rendered.
Aug. 30, 1915	Scup,	1,063	Sour, dried out and soiled.	Rendered.
Total,		12,744		

List of Adulterated or improperly Labeled Foods, etc., for August, 1915.

Number of Sample.	Character of Sample.	Name of Manufacturer, Wholesaler or Producer.	Results of Analyses.
28062	Orangeade,	Boston and Lowell Bottling Company, Boston,	Contained benzoic acid.
q 16593	Milk,	Louis Montenari, Plymouth,	Total solids, 11.06 per cent.; fat, 3.90 per cent.; contained added water.
q 16594			Total solids, 11.16 per cent.; fat, 4 per cent.; contained added water.
3296–A	Milk,	Antonio Casimioro, Plymouth,	Total solids, 11.92 per cent.; fat, 4 per cent.; contained added water.
q 16631	Milk,	William R. Kratsch, Attleboro,	Total solids, 11.14 per cent.; fat, 3.60 per cent.; contained added water.
q 16632			Total solids, 11.58 per cent.; fat, 3.60 per cent.; contained added water.
q 16673	Milk,	R. J. Cobb, Attleboro,	Total solids, 10.94 per cent.; fat, 2.30 per cent.; proteins, 2.94 per cent.; skimmed milk.
3432–A	Milk,	Frank P. Frazier and Son, Ipswich,	Total solids, 11.80 per cent.; fat, 2.80 per cent.; proteins, 3.30 per cent.; skimmed milk.
3472–A	Milk,	Clarence Phinney, South Hyannis,	Total solids, 11.72 per cent.; fat, 3.60 per cent.; contained added water.
3474–A			Total solids, 11.60 per cent.; fat, 3.70 per cent.; contained added water.
3476–A	Milk,	Mrs. Clarabell Bearse, South Hyannis,	Total solids, 12.08 per cent.; fat, 3.80 per cent.; contained added water.
3570–A	Milk,	Brown Caldwell, Stockbridge,	Total solids, 10.95 per cent.; fat, 1.75 per cent.; skimmed milk.
28336	Milk,	John Eaton, Chelmsford,	Total solids, 11.34 per cent.; fat, 2.30 per cent.; proteins, 3.11 per cent.; skimmed milk.
3636–A	Milk,	Morris Goldman, Chelsea,	Total solids, 11.34 per cent.; fat, 3 per cent.; contained added water.
3638–A			Total solids, 10.92 per cent.; fat, 3 per cent.; contained added water.

LIST OF ADULTERATED OR IMPROPERLY LABELED FOODS, ETC., FOR AUGUST, 1915 — *Con.*

Number of Sample.	CHARACTER OF SAMPLE.	Name of Manufacturer, Wholesaler or Producer.	Results of Analyses.
28342	Milk,	Kostonly Chmalska, Chelmsford,	Total solids, 11.08 per cent.; fat, 3.60 per cent.; contained added water.
28343			Total solids, 12 per cent.; fat, 4.40 per cent.; contained added water.
28346			Total solids, 11.10 per cent.; fat, 3.30 per cent.; contained added water.
28347			Total solids, 11.10 per cent.; fat, 3.10 per cent.; contained added water.
28349			Total solids, 11.26 per cent.; fat, 3.20 per cent.; contained added water.
28350			Total solids, 10.92 per cent.; fat, 3.20 per cent.; contained added water.
26566	Headache powders,	Dr. J. Chmielnicki, Somerville,	Contained acetanilid; not marked.
26567			Contained acetanilid; not marked.
2286–A	Cough syrup,	J. C. Webb Medical Company, Rockland,	Marked 8 per cent. alcohol; contained 14.46 per cent.

ERRATUM. — In the May–June Public Health Bulletin, on page 130, it is stated that Austin Brothers of Westfield had for sale jams and jellies which were adulterated. This was a regrettable mistake, as the Austin Brothers carry nothing but dry goods; consequently, the jams and jellies referred to were not obtained from them.

REPORT UPON THE WORK OF THE BACTERIOLOGICAL LABORATORY FOR THE MONTH OF AUGUST, 1915.

The following gives the total number of biological products and diagnostic outfits distributed by the bacteriological laboratory of the State Department of Health during the month of August, 1915: —

Biological Products.

Diphtheria antitoxin: —	
12,000 units (special for the Boston City Hospital),	285 bottles.
6,000 units (special for the Boston City Hospital),	26 bottles.
3,000 units,	2,819 bottles.
1,500 units,	1,145 bottles.
750 units,	510 bottles.
Smallpox vaccine,	27,462 tubes.
Typhoid vaccine,	1,669 ampoules.
Antimeningitis serum,	59 bottles.
Silver nitrate solution,	285 droppers.

Diagnostic Outfits.

Culture tubes,	819
Sputum bottles,	313
Widal outfits,	473
Bile outfits,	84
Malaria outfits,	11

The following gives the total number of bacteriological examinations made in the laboratory of the State Department of Health during the month of August, 1915: —

	Number of Examinations.	Diagnosis.		Release.	
		Positive.	Negative.	Positive.	Negative.
Diphtheria,	396	81	134	49	132

	Number of Examinations.	Positive.	Negative.	*Atypical.
Tuberculosis,	201	58	143	
*Typhoid fever (Widal test),	255	54	185	16
Typhoid fever (culture test),	25	1	24	
*Paratyphoid fever,	9	1	8	–
*Malaria,	9	–	9	
Miscellaneous,	108			

Total number of examinations made, 1,003.

RETURNS OF DISEASES.

Cases of Diseases declared by the State Department of Health to be Dangerous to the Public Health.

[Under the provisions of section 52 of chapter 75 of the Revised Laws.]

DISEASES.	Week ending —				
	Aug. 7.	Aug. 14.	Aug. 21.	Aug. 28.	Totals.
Actinomycosis,	1	–	–	–	1
Anterior poliomyelitis,	5	4	4	11	24
Cerebro-spinal meningitis,	1	1	5	3	10
Chicken pox,	6	13	6	19	44
Diphtheria,	89	151	135	146	521
Dog bite (requiring antirabic treatment),	1	5	4	3	13
Dysentery,	14	5	8	6	33
German measles,	–	3	1	1	5
Infectious diseases of the eye: —					
(*a*) Ophthalmia neonatorum,	45	53	55	52	205
(*b*) Suppurative conjunctivitis,	6	4	3	4	17
Malaria,	8	11	5	1	25
Measles,	111	89	60	57	317
Mumps,	15	4	6	7	32
Pellagra,	2	1	1	–	4
Rabies,	1	–	–	1	2
Scarlet fever,	63	55	66	67	251
Septic sore throat,	3	1	–	1	5
Tetanus,	2	–	1	2	5
Tuberculosis, pulmonary (or not classified).	125	125	182	159	591
Tuberculosis, other forms,	14	17	25	14	70
Typhoid fever,	50	42	68	73	233
Whooping cough,	93	153	134	95	475

RETURNS OF DEATHS.

DEATHS FROM DISEASES DECLARED BY THE STATE DEPARTMENT OF HEALTH TO BE DANGEROUS TO THE PUBLIC HEALTH.

[Under the provisions of chapter 210, Acts of 1913.]

DISEASES.	WEEK ENDING —				
	Aug. 7.	Aug. 14.	Aug. 21.	Aug. 28.	Totals.
Actinomycosis,	1	–	–	–	1
Anterior poliomyelitis,	–	2	–	–	2
Cerebro-spinal meningitis,	2	1	2	2	7
Diphtheria,	9	11	4	11	35
Dysentery,	–	–	3	–	3
Measles,	2	4	–	2	8
Ophthalmia neonatorum,	–	–	–	2	2
Pellagra,	1	–	1	–	2
Rabies,	1	–	–	1	2
Scarlet fever,	–	3	2	–	5
Septic sore throat,	1	1	1	–	3
Small pox,	–	1	–	–	1
Tetanus,	1	–	–	1	2
Tuberculosis, pulmonary (or not classified).	54	45	51	56	206
Tuberculosis, other forms,	16	7	8	11	42
Typhoid fever,	4	3	3	7	17
Whooping cough,	6	4	6	7	23

WEEKLY RETURNS OF DEATHS FROM DISEASES DECLARED BY THE STATE DEPARTMENT OF HEALTH TO BE DANGEROUS TO THE PUBLIC HEALTH IN CITIES AND TOWNS IN MASSACHUSETTS.

[Under the provisions of chapter 210, Acts of 1913.]

In all cases where the name of a community is not mentioned it signifies that no deaths from these diseases have been reported to this office for the period covered by the table.

Week ending Aug. 7, 1915.

CITIES AND TOWNS.	Population. Census for 1910.	Diphtheria.	Measles.	Scarlet Fever.	Tuberculosis, Pulmonary (or not classified).	Tuberculosis, Other Forms.	Typhoid Fever.	Whooping Cough.
Boston, ...	686,092	5[1]	1	–	17[2]	8[2]	–	1
Worcester, ...	145,986	–	–	–	2	–	–	–
Fall River, ...	119,295	–	–	–	4	1	1	–
Lowell, ...	106,294	–	–	–	1	1	–	–
Cambridge, ...	104,839	–	–	–	2	–	–	1
New Bedford, ...	96,652	–	–	–	–	1	–	–
Lynn, ...	89,336	–	–	–	5	–	–	–
Springfield, ...	88,926	1	–	–	2	–	1	–
Lawrence, ...	85,892	–	1	–	1	–	1	–
Somerville, ...	77,236	1	–	–	1	–	–	–
Holyoke, ...	57,730	–	–	–	–	1	–	–
Malden, ...	44,404	–	–	–	1	–	–	–
Haverhill, ...	44,115	–	–	–	1	–	–	–
Salem, ...	43,697	–	–	–	2	–	1	–
Newton, ...	39,806	–	–	–	–	–	–	1
Fitchburg, ...	37,826	–	–	–	–	1	–	–
Taunton, ...	34,259	–	–	–	–	1	–	–
Pittsfield, ...	32,121	–	–	–	2	–	–	–
Waltham, ...	27,834	–	–	–	1	–	–	–
Medford, ...	23,150	–	–	–	1	1	–	–
Leominster, ...	17,580	1	–	–	1	–	–	–
Westfield, ...	16,044	–	–	–	1[1]	–	–	–
Peabody, ...	15,721	–	–	–	1	–	–	–
Clinton, ...	13,075	–	–	–	2	–	–	–
Framingham, ...	12,948	–	–	–	1	–	–	–
Greenfield, ...	10,427	–	–	–	–	1	–	–
Saugus, ...	8,047	–	–	–	1	–	–	1
Bridgewater, ...	7,688	–	–	–	2	–	–	–
Blackstone, ...	5,648	–	–	–	–	–	–	1
Walpole, ...	4,892	1	–	–	–	–	–	–
Wareham, ...	4,102	–	–	–	–	–	–	1
Ayer, ...	2,797	–	–	–	1	–	–	–
Boxford, ...	718	–	–	–	1	–	–	–
Totals, ...	–	9	2	–	54	16	4	6

In addition to the above, 1 death occurred from actinomycosis, 1 death from septic sore throat, and 1 death from cerebro-spinal meningitis (nonresident) in Boston; 1 death from cerebro-spinal meningitis in Lynn; 1 death from rabies in Medford; 1 death from tetanus in Newburyport; and 1 death from pellagra in Northampton.

[1] One nonresident.

[2] Three nonresidents.

Week ending Aug. 14, 1915.

CITIES AND TOWNS.	Population. Census for 1910.	Diphtheria.	Measles.	Scarlet Fever.	Tuberculosis, Pulmonary (or not classified).	Tuberculosis, Other Forms.	Typhoid Fever.	Whooping Cough.
Boston,	686,092	6[1]	2	3[2]	21	4[2]	1	1
Worcester,	145,986	–	–	–	1	–	–	–
Fall River,	119,295	–	–	–	4	–	–	–
Lowell,	106,294	1	–	–	3	1	–	–
Cambridge,	104,839	–	–	–	–	–	–	1
Lynn,	89,336	–	–	–	3	–	–	–
Springfield,	88,926	–	1	–	1	–	1	–
Lawrence,	85,892	–	–	–	1	1	–	–
Somerville,	77,236	–	–	–	1	–	1	–
Brockton,	56,878	–	–	–	1	–	–	–
Haverhill,	44,115	1	–	–	–	–	–	–
Newton,	39,806	–	–	–	–	–	–	1
Fitchburg,	37,826	1	–	–	–	–	–	–
Waltham,	27,834	1	1	–	–	–	–	1
Chicopee,	25,401	–	–	–	1	–	–	–
Medford,	23,150	–	–	–	1	–	–	–
Westfield,	16,044	–	–	–	2[1]	–	–	–
Greenfield,	10,427	–	–	–	1	–	–	–
Great Barrington,	5,926	–	–	–	–	1	–	–
Ipswich,	5,777	–	–	–	1	–	–	–
Warren,	4,188	–	–	–	1	–	–	–
Marshfield,	1,738	–	–	–	1	–	–	–
Plainville,	1,385	1	–	–	–	–	–	–
Whately,	846	–	–	–	1	–	–	–
Totals,	–	11	4	3	45	7	3	4

In addition to the above, 1 death occurred from anterior poliomyelitis in Springfield and 1 in Boston, 1 septic sore throat in Boston; 1 death from cerebro-spinal meningitis in Chicopee; and 1 death from smallpox in New Bedford.

[1] Two nonresidents.

[2] One nonresident.

Week ending Aug. 21, 1915.

CITIES AND TOWNS.	Population. Census for 1910.	Diphtheria.	Measles.	Scarlet Fever.	Tuberculosis, Pulmonary (or not classified).	Tuberculosis, Other Forms.	Typhoid Fever.	Whooping Cough.
Boston,	686,092	–	–	–	18[1]	1	1	3
Worcester,	145,986	1	–	–	3	–	–	–
Fall River,	119,295	–	–	–	2	–	1	–
Lowell,	106,294	–	–	–	4	–	1	–
Cambridge,	104,839	–	–	1	4	–	–	–
New Bedford,	96,652	–	–	–	2	–	–	–
Lynn,	89,336	–	–	–	1	2	–	1
Springfield,	88,926	–	–	–	1	1	–	1
Somerville,	77,236	2	–	–	2	–	–	–
Holyoke,	57,730	–	–	–	–	2	–	–
Brockton,	56,878	–	–	1	1	1	–	–
Newton,	39,806	1	–	–	–	–	–	–
Fitchburg,	37,826	–	–	–	2	–	–	–
Taunton,	34,259	–	–	–	1	–	–	–
Everett,	33,484	–	–	–	1	–	–	–
Waltham,	27,834	–	–	–	1	–	–	–
Northampton,	19,431	–	–	–	1	–	–	–
Beverly,	18,650	–	–	–	–	–	–	1
Westfield,	16,044	–	–	–	1[1]	–	–	–
Peabody,	15,721	–	–	–	2	–	–	–
Milford,	13,055	–	–	–	1	–	–	–
Webster,	11,509	–	–	–	1	–	–	–
Danvers,	9,407	–	–	–	1	–	–	–
Douglas,	2,152	–	–	–	1	–	–	–
Berlin,	904	–	–	–	–	1	–	–
Totals,	–	4	–	2	51	8	3	6

In addition to the above, 1 death occurred from cerebro-spinal meningitis in Springfield and 1 in Boston, also 1 death from pellagra in Boston; 1 death from dysentery in Greenfield, 1 in Medford and 1 in Ipswich; also 1 death from septic sore throat in New Bedford.

[1] One nonresident.

Week ending Aug. 28, 1915.

CITIES AND TOWNS.	Population. Census for 1910.	Diphtheria.	Measles.	Scarlet Fever.	Tuberculosis, Pulmonary (or not classified).	Tuberculosis, Other Forms.	Typhoid Fever.	Whooping Cough.
Boston, ...	686,092	3[1]	1	–	19[1]	4[1]	3	5
Worcester, ...	145,986	–	–	–	3	1	–	–
Fall River, ...	119,295	–	–	–	1	–	–	–
Lowell, ...	106,294	–	–	–	1	1	–	–
Cambridge, ...	104,839	–	–	–	3	–	–	–
New Bedford, . . .	96,652	–	–	–	1	–	1	–
Lynn, ...	89,336	–	–	–	3	–	–	–
Springfield, ...	88,926	–	1	–	–	–	–	1
Lawrence, ...	85,892	–	–	–	3	1	–	–
Somerville, ...	77,236	–	–	–	3	–	–	–
Brockton, ...	56,878	–	–	–	1	–	–	–
Malden, ...	44,404	1	–	–	–	–	–	–
Haverhill, ...	44,115	3	–	–	2	–	–	–
Newton, ...	39,806	–	–	–	–	–	1	1
Fitchburg, ...	37,826	–	–	–	2	–	–	–
Taunton, ...	34,259	–	–	–	3	–	–	–
Everett, ...	33,484	–	–	–	2	–	–	–
Chelsea, ...	32,452	–	–	–	1	–	–	–
Waltham, ...	27,834	–	–	–	1	–	–	–
Chicopee, ...	25,401	2	–	–	–	–	–	–
North Adams, . . .	22,019	–	–	–	–	–	1[1]	–
Beverly, ...	18,650	–	–	–	1	–	–	–
Westfield, ...	16,044	–	–	–	–	1	–	–
Southbridge, ...	12,592	–	–	–	1	–	–	–
Greenfield, ...	10,427	–	–	–	1	–	–	–
Northbridge, ...	8,807	–	–	–	1	1	–	–
Norwood, ...	8,014	–	–	–	–	–	1	–
Milton, ...	7,924	1	–	–	–	–	–	–
Bridgewater, ...	7,688	–	–	–	–	1	–	–
Blackstone, ...	5,648	–	–	–	1	–	–	–
Pepperell, ...	2,953	1	–	–	–	–	–	–
Chatham, ...	1,564	–	–	–	–	1	–	–
North Reading, . . .	1,059	–	–	–	1	–	–	–
Wendell, ...	502	–	–	–	1	–	–	–
Totals, ...	–	11	2	–	56	11	7	7

In addition to the above, 1 death occurred from cerebro-spinal meningitis in Boston (nonresident) and 1 in Peabody; 1 death occurred from rabies in Lawrence; 2 from ophthalmia neonatorum and 1 from tetanus in Pittsfield.

[1] One nonresident.

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Public Health Bulletin

ISSUED MONTHLY

BY THE

STATE DEPARTMENT OF HEALTH
OF MASSACHUSETTS

October, 1915

Vol. 2, No. 9

ALLAN J. McLAUGHLIN, M.D., *Commissioner*

The Common Health of the Commonwealth

Entered as Second-class Matter Oct. 26, 1914, at the Post Office at Boston, Mass.,
under the Act of Aug. 24, 1912

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Approved by The State Board of Publication.

TUBERCULOSIS DISPENSARIES.[1]

BASED ON THE APPLICATION OF THE MASSACHUSETTS DISPENSARY LAW.

EUGENE R. KELLEY, M.D., *Director of Division of Communicable Diseases, Massachusetts State Department of Health.*

I. MEASURES AVAILABLE IN THE STRUGGLE AGAINST TUBERCULOSIS.

THE agencies upon which we must rely in our struggle against tuberculosis may be roughly divided into those favoring general bodily resistance to disease and those aimed specifically against the spread of the tubercle bacillus.

In the first group may be placed such things as good personal hygiene, temperate habits, proper housing conditions, improvement in occupational hygiene, well-balanced nutrition, adequate wages and the like. It is noteworthy that our English colleagues, both in precept and practice, place much greater stress upon this feature of anti-tuberculosis work than is the rule in America.

Doubtless the trend in American tuberculosis work is not to place sufficient emphasis upon these fundamental factors, but, on the other hand, their precise quantitative relationship to the prevention of tuberculosis is tantalizingly vague and elusive.

In the other group we may place such specific objects as —

(1) Widespread popular education regarding the nature of tuberculosis.

(2) Elimination of tubercle bacilli from food (*i.e.,* tubercle bacillus free milk and butter).

(3) Special hygiene for the "pretuberculous" child.

(4) Reporting of cases and supervising of the personal hygiene of the consumptive.

(5) Isolation of the dangerous consumptive by hospitalization.

(6) Specific instruction in prophylaxis for the consumptive and his family.

II. THE PLACE OF THE TUBERCULOSIS DISPENSARY.

The evolution of anti-tuberculosis work has demonstrated the absolute necessity of the tuberculosis dispensary. It is an essential cog in the anti-tuberculosis machine if the specific objects just enumerated are to be followed out effectively. Without the tuberculosis dispensary or its equivalent none of the specific objects mentioned can be properly carried out, save, perhaps, the elimination of tubercle bacilli from food. With it not only can *these* things be done but environmental and general hygienic measures can be pushed much more vigorously and effectively.

---

[1] Read at the New England Conference on Tuberculosis, Springfield, Mass., Friday, Oct. 22, 1915.

The tuberculosis dispensary has been most appropriately called the clearing house for anti-tuberculosis work. So it is. It is also vastly more than a clearing house. It is the central dynamo from which all the other anti-tuberculosis agencies should largely receive their charge of energy. It is the one means by which we can ever hope to answer the important question: "How much actual value has been the vast amount of money and energy already expended against tuberculosis in reducing the morbidity and mortality rates from the disease?" It is the most practical and businesslike agency available for determining where our money and energy should go in the future to get a maximum of return in tuberculosis reduction. Furthermore, the tuberculosis dispensary that is alive to its opportunities should be the most potent of all factors in the carrying on of that great fundamental in anti-tuberculosis work, — hygienic education.

III. The Essentials of an Efficient Tuberculosis Dispensary.

In a phrase I would sum up the essentials of an efficient tuberculosis dispensary as 80 per cent. "nurse," 15 per cent. medical service, and 5 per cent. equipment. The term "nurse" in the present sense means the qualified tuberculosis social worker; whether she be a "trained" nurse or not is largely immaterial.

The *essentials* of equipment may be dismissed very briefly. They are reasonably well defined, I think, in the minimum requirements of the State Department of Health. They are decently clean, modestly equipped, conveniently located rooms so arranged that patients can be properly examined and records properly kept.

The *essentials* of medical service are a physician or physicians who can detect early tuberculosis with a reasonable percentage of accuracy, who are humanly interested in the tuberculosis problem, who are not so driven by other professional duties that they cannot attend clinics regularly, and who are not afraid of work.

The *essentials* of the efficient tuberculosis dispensary nurse! It is another task to undertake to depict them. In the first place, it should be recognized that her duties are radically different from those of the attending physician. Attendance at the clinic hours constitutes the major portion of his duties, while the actual dispensary hours are a minor part of the duties of the successful tuberculosis nurse. The physician is expected to furnish technical knowledge when the patient is first examined by him, and to give proper advice, direction and encouragement when the patient is brought before him from time to time. The nurse must first locate the patient and then bring him in touch with the doctor. Further, the patient and his family, his surroundings, his past, his habits, his finances, his possible sources of aid, his religion, even his prejudices, must be studied. This study she must make in such a sympathetic and friendly fashion that by it he and his family and friends will eventually realize that her only object is the betterment of his condition and the protection of those about him. In addition the nurse must take counsel with the local authorities and the dispensary doctor and perchance philanthropic organizations, religious organizations, educational authorities, etc., to determine what is the best *practical* solution of each individual tuberculosis problem. Right at this point will come the most of the discouragements of the tuberculosis nurse. She will see clearly that the sanatorium is best for this patient, the orthopedic clinic for that, the local tuberculosis hospital for another, and a careful home régime sufficient for a fourth. But there is no vacancy in the sanatorium, nor will there be one for months. She will have to undergo the disheartening experience of seeing an early favorable case develop into an advanced unfavorable one before the patient can even get a chance at the sanatorium. In another instance the parents cannot be made to realize that the "growing pains" are as serious as the nurse and dispensary doctor claim, and so the nurse must helplessly watch an early tuberculous hip develop into a late, badly damaged one before the orthopedic clinic will be seriously considered.

Or perhaps there is no local tuberculosis hospital. Then the nurse must rely upon the intelligence and care with which her carefully explained directions are followed out by the consumptive's family. She knows that upon this depends their safety and freedom from infection. These things, and they are the commonplace things in an active tuberculosis nurse's work, are sufficiently discouraging in themselves.

Hence the essential characteristics of the successful tuberculosis dispensary nurse must include a certain optimism that refuses to be beaten by these discouragements; a certain doggedness and determination of character, obstinacy if you will, that impels her to fight the harder for the things that should be simply because they are not; a certain vision of the possibilities of the tuberculosis campaign as a whole that can enable her to see that she fights not alone nor in a losing cause no matter what the present limitations of her local sphere of action may be; a certain serenity of soul, an internal "preservative of the spirit" as it were, that will keep the "milk of human kindness" from souring utterly and her daily work degenerating into mechanical routine; a certain equanimity of spirit that will enable her to face the petty and malicious annoyances of her daily life cheerfully and undismayed; a certain saving sense of humor that will keep her from falling into the ridiculous when she is striving to achieve the impressive; and above all an endowment in liberal measure of that most blessed of all mental equipments, — common sense.

I would end this enumeration of the essential characteristics of the good tuberculosis dispensary nurse right at this point were it not that some will say, "What about training experience?" To this query I can only say training and experience are most valuable; they are the things that our present tuberculosis dispensary nurses lack the most, and, lacking, are thereby most handicapped; but after all, experience is something that we can achieve. Optimism, equanimity, imagination, common sense, — these are things inborn; without them experience alone is of doubtful value.

It has been my good fortune to visit many of the tuberculosis dispensaries in the State in the past few months, and, through the district health officers, the nurses' conference and correspondence, to get a very good insight into the results and possibilities of them all. Therefore, I feel that I can safely predict that the wisdom of the tuberculosis dispensary law is going to be made very evident in all the 54 cities and towns affected thereby, with perhaps three or four exceptions. The principal reason why I feel so confident on this point is because I know that as a group the nurses connected with these dispensaries possess in a marked degree the characteristics that I have mentioned as essential to success.

IV. The Massachusetts Dispensary Law.

Little needs to be said relative to the putting into effect of the law requiring "each city and town having a population of 10,000 or over at the 1910 Census to maintain a free dispensary for the discovery, treatment and supervision of needy persons resident within its limits and afflicted with tuberculosis." This law was on the statute books, was mandatory in nature, and gave no loophole for the exceptional community, and the State Department of Health was explicitly charged with its enforcement. Accordingly, the State Commissioner of Health, early in the present year, served notice on all the cities and towns affected by the law that they would be given till July 1 to comply with its provisions. All the cities and towns complied.

The tactful services of the State district health officers, in advising and assisting the local boards of health to carry out the requirements of the law, deserve special mention. But the fair-minded spirit in which the local authorities, in almost every instance, did their share is equally noteworthy. Even in instances, and they were many, where the local authorities believed that there was no need for such an institution as a tuberculosis dispensary in their town they evinced a spirit of co-operation and willingness to give it a fair trial that was most encouraging.

If time permitted it would be most interesting to point out in detail some of the difficulties that were encountered in attempting to apply a general law to so diversified a group of communities, and the policies worked out by the district health officers in trying to square legal requirements with the common-sense needs of the individual community. In all instances the district health officer has been and is the final referee as to the fitness of the dispensary.

In general, the most difficult problem has been the 10,000 to 20,000 town. In many such communities I believe there is ample room, even pressing need, for the full time of a skilled tuberculosis worker. In others the need is not so evident. To meet these situations it has been the policy of the State Department of Health, if the local authorities or organizations displayed any tendency in this direction, to encourage from the outset a broadening of the functions of the dispensary so that they would include all those that can be considered the functions of a public health social service center.

Such, probably, will be the logical evolution of most of our tuberculosis dispensaries in the smaller cities and towns, and possibly in many of the larger cities as well.

Even in those towns where public sentiment did not seem yet ready to sponsor the general public health dispensary idea, if the work of the tuberculosis dispensary would not obviously necessitate the entire services of a nurse a definite policy has been carried out of combining with the services of the tuberculosis dispensary nurse several of the fields of public health nursing. In other words, the dispensary nurse is also the school nurse, or the factory nurse, or the board of health nurse, or the baby hygiene nurse, or the district nurse, or several of these rolled in one. This scheme is working out splendidly in many instances. Its greatest weakness is in the danger of underestimating the already existing but unrecognized local needs in many of these lines of public health service, resulting in inadequate service and superficial work in every line. It is obvious that for such public health nursing positions a hospital training school course, supplemented by practical field experience in one or more lines of public health nursing, is much more essential than that the nurse devote herself to social service tuberculosis work alone. The question of whether or not such a readjustment of public health nursing work for larger centers is desirable opens up too big a field for consideration here.

From personal observation, however, I am compelled to testify that in certain instances this tendency towards generalization of the public health nurse's work results in such serious overloading of a single worker that either no part of her manifold duties are properly done, or else she is always in imminent danger of succumbing to the fate of the classic chameleon, who, you will remember, turned red with ease when placed on the red cloth, green with equal readiness upon the green cloth, and blue upon the blue cloth, but killed himself trying to successfully qualify on the Scotch plaid.

V. Results.

It is rather premature to speak of results as yet in connection with the State-wide tuberculosis dispensary policy of Massachusetts, but a few general statements may be of interest.

The tuberculosis dispensaries of the State report altogether a total of 2,778 individuals who have had first examinations since July 1 of this year. Of this total, 27 per cent. are examinations made by dispensaries that were non-existent before July. Thirty-two per cent. are reported from Boston and 68 per cent. by the other dispensaries of the State.

For a beginning this showing is distinctly encouraging, but it is only a fraction of the total showing as regards actual utilization of the examining facilities of the tuberculosis dispensaries that many of these dispensaries will show in the next few months.

However, the actual examinations are only a rough index of the activity and value of the dispensary. Many of our new nurses are very wisely contenting themselves so far with studying the local tuberculosis situation, getting in touch with the doctors, and getting acquainted in their new fields of work. They have hardly begun to get patients into the dispensary for examination, to say nothing of the "contacts." In the near future many of these nurses will bring scores of such cases into touch with the dispensary service.

At present a very large percentage of cases examined are found to be not only positive but advanced. If the dispensaries are doing true preventive work we should see a steady increase in the percentage of cases examined and found incipient, doubtful or not tuberculous.

Every dispensary nurse should make it one of her fixed policies to endeavor to have all members of a consumptive's family examined in the dispensary or elsewhere whether they exhibit any symptoms of the disease or not. Further, they should be kept under close observation for at least two years after the death or permanent removal of the patient.

This thought suggests another line of results that are highly significant, although their ultimate possibilities have not begun to be realized yet by either the medical profession, the health authorities or the dispensary nurses themselves. The dispensary nurse need not, should not, confine her field work to the dispensary clientele alone. In every city and town she should co-operate with the practicing physicians as well. Some physicians seem to feel that it is the policy of the State to step in and carry their tuberculosis patients off to the dispensary regardless of the doctor's wishes, and I fear the enthusiasm of some of our dispensary nurses has led them into injudicious urging of tuberculosis sufferers to consult the dispensary without first consulting the physician who is already in attendance upon the case and hearing his wishes in the matter. On the contrary, the physician should feel that in the tuberculosis dispensary nurse he has an ally, an assistant who is at all times at his service to supplement and elucidate to his tuberculosis patients and their families the rules of hygiene and prophylaxis that the physician wishes them to carry out. It is very encouraging to note that several nurses have already demonstrated that this sort of co-operation can be worked out. For example, in one of the most successful of our smaller town dispensaries the nurse (it is significant that she is a full-time worker) reports 38 cases now under the active supervision of the dispensary, but in addition, 51 cases who are not now, and few if any of whom ever will be, dispensary cases, whom she visits regularly at the request of and in co-operation with their attending physicians.

VI. Some Shortcomings.

It would be far from the truth to leave an impression that the developments of the dispensary system during the past six months have been entirely satisfactory. The shortcomings, collective and individual, of the various dispensaries are obvious.

A few have apparently taken the establishing of the clinic and the going through the motions of acquiescence with the minimum requirements as all that would be required of them, and have shown no signs of animation since.

In other instances certain unavoidable circumstances have hindered the work from getting properly under way, but practically all of these difficulties are now surmounted.

Chief among the shortcomings that are more or less true of the dispensaries as a whole is lack of grasp upon the tuberculosis problem in its entirety and its relations to other phases of public health by dispensary physicians and nurses.

Another conspicuous deficiency is the lack of special training and experience on the part of nurses. An attempt is being made to correct this by —

(*a*) Formation of district public health nursing associations, whereby the dispensary nurses can keep in touch with each other and with all the other nurses in public health work in their section, and exchange ideas and experiences.

(*b*) The establishment of a regular monthly conference under the joint auspices of the State Department of Health and the Instructive District Nursing Association.

(*c*) A policy of close personal touch with all the tuberculosis dispensaries by all the district health officers.

Another conspicuous shortcoming is the failure on the part of the nurses to establish at the outset a personal acquaintance with all the physicians in their territory, and to make this preliminary acquaintance a stepping-stone to a better mutual understanding and sympathy between the practitioner and the dispensary workers.

Another common shortcoming on the part of dispensary officials is that of failure to study the fundamentals of the tuberculosis problem in their own town thoroughly *first,* before devoting much of their time and energies to more spectacular measures of minor or doubtful value.

The authorities and supporters of every tuberculosis dispensary, including the board of health, the local tuberculosis organizations and the medical and nursing staff, should unite at the outset in conducting a careful, exhaustive tuberculosis survey of the community. Only by this means can they determine the real, not merely the officially recorded, extent of their local problem. They must do this before they can logically plan for the future. It will not do to rely upon the official records of reported cases. The death records for at least five years back should be studied carefully and intelligently, and an attempt made to outline the true extent of the local tuberculosis problem by following out the leads that such a study will unfold to the competent investigator.

In this connection the following typical survey findings are illuminating: —

In a certain Massachusetts city of moderate size a study of the death records revealed the fact that only 32 per cent. of the persons who had actually been recorded as dying of tuberculosis in a period covering six years immediately preceding the survey had ever been *reported* during life as ill from tuberculosis. The mere searching out of the "contacts" with recorded deceased victims will at once give a dispensary staff a fruitful field of investigation, and one teeming with possibilities of real preventive dispensary service.

VII. FUTURE PROBLEMS AND POSSIBILITIES.

Among the future problems of the tuberculosis dispensary the most pressing and immediate is that of furnishing data of a high degree of reliability as to the probable immediate needs of each community for tuberculosis hospitalization. This can be done only by means of a careful local survey.

Another problem that the tuberculosis dispensary must largely help to solve is that of the incorrigible consumptive. We who are in the thick of the fight realize just how dangerous he is, to say nothing of how great a nuisance he is, and that he ought to be restrained just as is the lunatic, the imbecile or the criminal.

Public opinion is slowly but surely moving in the same direction. The dispensary physicians and nurses see the terrible consequences of the incorrigible consumptive's selfishness, ignorance and obstinacy day by day. They have before them an opportunity for great public service in molding and hastening public opinion to the point where it will demand restraint for such individuals through the strong arm of the law.

Another interesting, though I believe comparatively simple, problem is that of extending the essential spirit of tuberculosis dispensary service to those communities not already served. The rural nurse is the solution of this problem. She, the district health officer, and the country practitioner can be relied upon to handle this question once they are given the opportunity.

Several other problems of interest might be discussed if time, space and circumstances permitted. That of better co-operation between the practicing physician and the dispensary workers has been referred to already. Analogous to it is the problem of efficient co-operation with charitable organizations, educational authorities, industrial organizations including both those of employees and employers, religious organizations and the like.

The future possibilities of the tuberculosis dispensary are too many and varied to more than touch upon here.

Greatest of all is the opportunity to utilize the personnel of those dispensaries in an attack against tuberculosis at its most logical point of beginning, — the child. Whether the dispensary nurse be also actively engaged in school nursing or not, there should be the closest co-operation between the school nurse and physician and the dispensary nurse and physician. Nor should the dispensary doctor and nurse wait till the child is of school age.

Another development of the tuberculosis dispensary's work should be that of taking in hand the arrested case fresh from the sanatorium, and keeping him under such close yet sympathetic guidance that both he and the community conserves in its entirety the physical, moral and economic gain that his sanatorium residence has brought.

It is also to the tuberculosis dispensary that we must chiefly look to determine where the "lost motions" and lack of co-ordination have been in our anti-tuberculosis work hitherto, in order to correct them and render our future work more efficient in quality as well as in quantity. In this connection an immensely far-reaching opportunity for public service by the tuberculosis dispensaries lies before them in the simple procedure of collecting accurate data.

The 54 cities and towns of Massachusetts now maintaining tuberculosis dispensary service represent approximately 80 per cent. of the population of the Commonwealth.

These dispensaries should eventually have always on hand accurate scientific information concerning everybody and everything that relates to the tuberculosis situation in each community. They should not only know *who* are the tuberculous, and *where* are the tuberculous, but should begin to have some illuminating data upon the great fundamental question of all, — *why* are they tuberculous.

From such information can best be determined what will be the most effective strategy to employ in the anti-tuberculosis campaigns of the future, which should be and must be immensely more efficient than the similar campaigns of the past.

HEALTH FIRST.[1]

IT is self-evident that the mental development of the child cannot be secured through education unless it has sufficient physical vigor to perform the acts required by the educative process. Nature is concerned first of all in maintaining life, and demands that the energy of the child be directed primarily toward that end. The normal child is endowed with more energy or vigor than is required for nutrition and growth. For educational purposes this "factor of safety" may be regarded as the margin to be utilized by the school for intellectual development.

If vigor be deficient on account of inadequate nutrition, imperfect breathing due to adenoids, constant combating of bacterial poisons from infected tonsils or decayed teeth, or if it be made ineffectual by imperfect sense organs, there is less margin left to be utilized in educational processes. This is the reason that children suffering from these physical handicaps often do not keep up with their grades in school.

The margin of physical vigor in excess of bodily needs is the capital which the child has to invest in education. It is the first business of the school to see that this capital is as large as possible. The school, therefore, should give primary attention to the health of the children, not only for the sake of health itself, but also to the end that education may be more effective.

The health problem in the schools includes school hygiene, medical inspection and health instruction. School hygiene is concerned with the physical environment as regards air, light, heat, seating facilities, etc., and with the adjustment of studies to the mental activity of the child with reference to fatigue and efficiency. The former is largely an architectural problem, while the latter is a pedagogical problem.

Medical inspection is concerned with the prevention of communicable diseases and the discovery and correction of physical defects which serve as handicaps to the progress of the child. Health instruction should deal not only with personal hygiene and the health of the individual, but also with the measures for the protection of others from the causes of disease or ill health. These problems are best dealt with by medical inspectors, school nurses, teachers and health officials working in co-operation.

Health instruction should be something more than instruction in anatomy and physiology. A child has little use for the knowledge that there are 208 bones in the body, or a few more in case sesamoid bones have developed, and that these bones are moved by upwards of 500 muscles, but he does have use for a knowledge of how to protect his body from invasion by any one of the several species of germs that cause communicable diseases. It is of small moment for a child to know that one of the small facial muscles is called the *levator-labii-superioris-alaeque-nasi,* but it is of much moment that he know how to use his muscles to keep his body in proper position. The knowledge that a tooth is composed of enamel, dentine and pulp is of small value compared to the knowledge of how to keep the teeth clean to prevent decay.

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[1] Reprinted from Public Health News, New Jersey State Department of Health, September, 1915.

Any information that may be imparted by the teacher, health official, medical inspector or nurse will be of little value to the child unless it results in a bettering of his conduct. A boy gains nothing by knowing that spitting on a ball may spread disease unless he ceases to spit. A child does not profit by the knowledge that an erect posture gives the lungs more room by allowing greater latitude in respiratory movements unless he acquires the habit of an erect carriage. The formation of hygienic habits is the end to be sought in health instruction. Such habits can be more effectively formed if the child's surroundings first be made hygienic and his physical handicaps removed.

THE MICROSCOPE AND CLEANLINESS.

GREAT things have small beginnings. A spectacle maker, Jan Leippersheim by name, living in Holland, invented a crude magnifying glass in 1608. Anton von Leuwenhoek, born in Delft, this day 1632, improved this clumsy toy and evolved a compound microscope which has become the most valuable sanitary tool yet devised by man. That first microscope was as far removed from the high-powered instrument of to-day as is the modern American from the original caveman. Yet by this faulty means Leuwenhoek — naturalist, physician and botanist — discovered certain minute bodies which he called "little animals." He made drawings of these, and to-day we know them for those useful friends and malignant enemies of man, — bacteria.

We spend our days surrounded by another world, a living world of countless billions, invisible to the naked eye, silent, tireless, destroying the living, consuming the dead, useful in the sciences and arts, yet often followed by a train of sickness, suffering and death. A curious paradox this, yet bacteria are at once the greatest friends and the fiercest foes of every living thing. Not animals, as Leeuwenhoek thought, but vegetables. Bacteria consist of two classes, those which prey on living things and those which reduce to their original minerals, fluids and gases every dead thing which they attack. They are of various shapes, round like marbles or straight like little sticks. They grow in clusters, chains and in pairs. They are ubiquitous. The dusty air, the earth and its waters, the interior of animals and plants all contain them. They cause the fermentation of foods, they make cheese, they produce disease, and some of them when killed and injected into an animal protect it against the very disease which they would have produced if living. Many of them live as harmless creatures in the body of an animal for years, only to kill their host when the opportunity presents. Their study has given birth to a science, — bacteriology, — one of the foundation stones of public health.

Their mere presence does not necessarily produce disease. Recalling the parable of the sower, some bacteria fall by the wayside, some fall upon stony places, and some fall in good ground and bring forth the fruit of suffering, perhaps of death. A normal, temperate life, free alike from the gluttony of idleness or overwork, the sound mind in the sound body, a cheerful, normal environment, — these form the stony places in which bacteria take no root. The depraved appetites of mind and body, the dark and sordid atmosphere of penury, the nerve-racking and strength-undermining trades, — these prepare the good ground.

The great weapon against bacteria is cleanliness. The mastery over premature death lies to a great measure in our own hands. Clean persons, clean cities, clean workshops and clean lives are the makers of public health. The United States Public Health Service, State and local health departments, and other sanitary bodies of this country are gradually bringing these facts home to the general public. In this way cleanliness is becoming more general, and the span of life in America is gradually being lengthened, all of which is largely due to the microscope.

TO PARENTS OF SCHOOL CHILDREN.

THE department of health of New Bedford is distributing among the school children of that city, both public and parochial, the following circular of advice to the parents of school children: —

With every school year many children are brought together, affording excellent opportunity for the transmission of diseases if precautionary measures are not observed.

Parents be watchful; note any unusual condition in your child.

The time to prevent serious disease is at the beginning.

The diseases to be dreaded among school children are scarlet fever, diphtheria, measles, chicken pox and whooping cough.

The co-operation of all parents in the city is earnestly desired by the health and school departments.

A very light case of any disease in one child may cause a very serious case in another.

Be suspicious of a cold. It generally leads to something else.

Call a doctor. If you cannot afford a physician the city can.

It is best to be on the safe side. "An ounce of prevention is worth a pound of cure."

Report at once to the board of health, if your child has either of the diseases named above.

It is your duty as a citizen to assist in keeping up a high health standard.

The health of a city is determined by its death rate. Look after the children.

Prevention, protection and precaution should be the watchwords of every parent.

J. UBALDE PAQUIN, M.D.,
COOPER GAW,
JOSEPH R. GLENNON,
Board of Health.

The advice given is indeed excellent, and this method of reaching the parents through the school children is a commendable one that could be well adopted in other places.

BE EXAMINED DURING TUBERCULOSIS WEEK.

PLANS for a national Medical Examination Day, a Children's Health Crusade Day, and a Tuberculosis Sunday, all to be held in Tuberculosis Week, December 6 to 12, were recently announced by the National Association for the Study and Prevention of Tuberculosis.

Medical Examination Day is set for Wednesday, December 8, and will be the first effort on a national scale to urge an annual physical examination for every one. Plans for the day include an appeal to induce every one, sick and well, to see a doctor and learn whether they are in good physical condition. The scheme includes also the inauguration on the part of factories, stores and offices of an annual physical examination for all employees. Thousands of anti-tuberculosis associations, other societies and dispensaries all over the country are expected to co-operate in furnishing free examinations for those not able to pay a physician.

Children's Health Crusade Day on Friday, December 10, is planned to interest and instruct school children in healthful living. Special exercises will be held at which lectures, essays and playlets will be given on the subject of health. This will also be the occasion for launching the Red Cross Christmas seal sale in the schools.

The culmination of the campaign will be the sixth annual celebration of Tuberculosis Sunday. Last year on Tuberculosis Day over 100,000 churches gave attention to the subject of tuberculosis by sermons, talks and announcements. The Governors of all the States will be asked to issue proclamations calling attention to the importance of increasing the knowledge of the public on how to avoid consumption. Clubs, lodges and societies will also be asked to consider the subject at a meeting either on Tuberculosis Sunday or some other day of Tuberculosis Week.

THE WORK OF THE MILK AND BABY HYGIENE ASSOCIATION.

George R. Bedinger, *Director*.

DURING the summer which has just passed the trustees of the Milk and Baby Hygiene Association made special efforts to meet the extra demands to help babies and mothers in Boston. As in the summers of 1913 and 1914, the trustees added three extra nurses to the regular staff of fourteen to keep more babies in Boston well.

The following tables show a comparison of the four months' summer work for the last four years: —

	1912.	1913.	1914.	1915.
Number of babies supervised, June to September,	1,767	2,185	2,556	2,997
Number of nurses' visits to registered babies' homes,	10,115	13,644	17,206	16,666
Deaths of babies, June to September, while registered with association,	29	16	15	6

Aside from the fact that 441 more babies have been helped than in any other summer, attention is called to the increase in the attendance at the weekly clinics for well babies. This has nearly doubled in two years. It shows that the nurses are doing very thorough educational work with mothers and that the supervision of the babies by physicians is even closer than before. This is shown as follows: —

	1912.	1913.	1914.	1915.
Number of clinics for well babies,	206	193	222	248
Average attendance at clinics,	21	30	37	37
Total attendance at clinics,	4,361	5,793	8,331	9,210

The prevention of illness among babies in a great city like Boston is a task not only for the summer but for every month in the year. Last summer's campaign was paid for by special gifts, but the maintenance and necessary improvement of our year-round service depends on our regular contributors and those who know the value of this work to keep babies well.

Too much stress must not be placed upon figures, upon the attempt continually to break records and to show each year that more work was done than in the previous year without due regard to the cost and effectiveness of that work. It is far better to take care of a few babies well than to try to take care of many babies and be obliged, through lack of time or funds, to do the work but partially.

We have reached the point where further growth must mean diminished efficiency if we are to continue our high standards of the past. A solution of the problem is difficult, since, in a way, our growth is involuntary; 40 per cent. of our new babies last year were referred by mothers of babies then or previously registered. The remedy is more nurses, which, of course, must mean more money.

FOOD AND DRUGS.

The following tables present the results of the laboratory examinations of samples of food and drugs collected during the month of September, 1915: —

The cities and towns in which samples were collected were: Abington, Amesbury, Arlington, Athol, Attleboro, Ayer, Beverly, Boston, Brookline, Cambridge, Chelsea, Chicopee, Clinton, Dracut, Easthampton, Everett, Fall River, Greenfield, Groton, Haverhill, Hingham, Holyoke, Ipswich, Littleton, Lowell, Lynn, Malden, Milford, Milton, Montague, Natick, North Reading, Orange, Pepperell, Quincy, Randolph, Reading, Rockland, Salem, Somerville, Southampton, Southbridge, Springfield, Swampscott, Wakefield, Waltham, Watertown, Webster, West Springfield, Westborough, Westfield, Westford, Wilmington, Winthrop, Woburn and Worcester.

SUMMARY OF ANALYSES.

ARTICLES EXAMINED.	Number found to be of Good Quality.	Number adulterated or varying from the Legal Standard.	Total.
Butter,[1]	10	3	13
Cider,	2	–	2
Cream,	13	2	15
Drugs,	54	2	56
Eggs,	1	–	1
Flavoring extracts: —			
Lemon,	1	1	2
Vanilla,	2	1	3
Fowl,[1]	1	–	1
Ice cream,	37	1	38
Milk,	346	152	498
Pork cheeks,[1]	3	1	4
Sausages,	9	–	9
Soft drinks,	3	–	3
Totals,	482	163	645

[1] Taken from cold storage.

PROSECUTIONS FOR VIOLATIONS OF THE LAW RELATING TO SLAUGHTERING.

Two convictions were secured during the month of September, 1915, for violation of the slaughtering laws, as follows: —

NAME OF DEFENDANT.	Place.	Nature of Offence.
J. B. Eaton, . . .	Peabody, . .	Selling unstamped meat.
J. B. Eaton, . . .	Peabody, . .	Slaughtering without inspector present.

Fines imposed, $15.

COLD STORAGE OF FOOD.

Articles in Cold Storage condemned upon Physical Examination as Unfit for Food.

Date.	ARTICLES.	Weight (Pounds).	Reasons.	Disposition.
Sept. 2, 1915	Chickens, . .	101	Decomposed, . .	Rendered.
Sept. 2, 1915	Mackerel, . .	500	Decomposed, . .	Rendered.
Sept. 3, 1915	Mackerel, . .	54	Decomposed, . .	Denatured.
Sept. 7, 1915	Veal, . . .	250	Decomposed, . .	Rendered.
Sept. 8, 1915	Sliced meat, . .	40	Decomposed, . .	Rendered.
Sept. 9, 1915	Breasts of chicken,	75	Decomposed, . .	Rendered.
Sept. 11, 1915	Chicken turkeys, .	35	Decomposed, . .	Rendered.
Sept. 11, 1915	Ox tails, . .	50	Decomposed, . .	Rendered.
Sept. 13, 1915	Chickens, . .	77	Decomposed, . .	Rendered.
Sept. 13, 1915	Mixed poultry, .	125	Decomposed, . .	Rendered.
Sept. 15, 1915	Pork meat, . .	180	Decomposed, . .	Denatured.
Sept. 17, 1915	Mackerel, . .	366	Decomposed, . .	Rendered.
Sept. 17, 1915	Sheep plucks, .	116	Decomposed, . .	Rendered.
Sept. 20, 1915	Pork cheek meat, .	57	Decomposed, . .	Incinerated.
Sept. 21, 1915	Fowl, . . .	70	Decomposed, . .	Rendered.
Sept. 21, 1915	Turkeys, . .	75	Decomposed, . .	Rendered.
Sept. 24, 1915	Geese, . . .	80	Decomposed, . .	Rendered.
Sept. 24, 1915	Chickens, . .	187	Decomposed, . .	Rendered.
Sept. 27, 1915	Turkeys, . .	318	Decomposed, . .	Rendered.
Sept. 29, 1915	Haddock, . .	545	Sour, dried out and soiled,	Rendered.
Total, .	. . . .	3,301		

Articles confiscated under Food Laws.

Date.	ARTICLES.	Weight (Pounds).	Name.	Address.
Sept. 30, 1915	Fish in pickle, .	400	Eugene H. Rock, . .	Chelsea.

LIST OF ADULTERATED OR IMPROPERLY LABELED FOODS, ETC., FOR SEPTEMBER, 1915.

Number of Sample.	CHARACTER OF SAMPLE.	Name of Manufacturer, Wholesaler or Producer.	Results of Analyses.
q 16719	Lemon extract,	Reliable Specialty Company, Boston,	Label false; practically no lemon oil present.
q 16719	Vanilla extract,	Reliable Specialty Company, Boston,	Label false; solution of artificial vanillin.
2269–T	Milk,	Llewelyn F. Gates, Westford,	Total solids, 8.94 per cent.; fat, 2.40 per cent.; contained added water.
2271–T	Milk,	Llewelyn F. Gates, Westford,	Total solids, 9.36 per cent.; fat, 2.20 per cent.; contained added water.
2273–T	Milk,	Llewelyn F. Gates, Westford,	Total solids, 9.38 per cent.; fat, 2.35 per cent.; contained added water.
2275–T	Milk,	Llewelyn F. Gates, Westford,	Total solids, 11.06 per cent.; fat, 3.40 per cent.; contained added water.
2411–T	Cream,	Johnson & Stetson, Bridgewater,	Fat, 20.50 per cent.; contained added water.
28430	Milk,	Charles H. Wells, Fall River,	Total solids, 12.50 per cent.; fat, 3.05 per cent.; proteins, 3.57 per cent.; skimmed milk.

REPORT UPON THE WORK OF THE BACTERIOLOGICAL LABORATORY FOR THE MONTH OF SEPTEMBER, 1915.

The following gives the total number of biological products and diagnostic outfits distributed by the Bacteriological Laboratory of the State Department of Health during the month of September, 1915: —

Biological Products.

Diphtheria antitoxin: —	
12,000 units (special for the Boston City Hospital),	142 bottles.
3,000 units,	2,973 bottles.
1,500 units,	844 bottles.
750 units,	605 bottles.
Smallpox vaccine,	23,686 tubes.
Typhoid vaccine,	2,038 ampoules.
Antimeningitis serum,	26 bottles.
Silver nitrate solution,	265 droppers.

Diagnostic Outfits.

Culture tubes,	946
Media,	6
Sputum bottles,	300
Widal outfits,	266
Bile outfits,	111
Malaria outfits,	42

The following gives the total number of bacteriological examinations made in the laboratory of the State Department of Health during the month of September, 1915: —

	Number of Examinations.	Diagnosis.		Release.	
		Positive.	Negative.	Positive.	Negative.
Diphtheria,	638	93	265	79	201

	Number of Examinations.	Positive.	Negative.	*Atypical.
Tuberculosis, ...	211	54	157	
*Typhoid fever (Widal test), . .	263	66	176	21
Typhoid fever (Culture test), .	69	8	61	
*Paratyphoid fever, ...	4	–	4	–
Malaria, ...	16	1	15	
Miscellaneous, ...	77			

Total number of examinations made, 1,278.

RETURNS OF DISEASES.

Cases of Diseases declared by the State Department of Health to be Dangerous to the Public Health.

[Under the provisions of section 52 of chapter 75 of the Revised Laws.]

DISEASE.	Week ending —				
	Sept. 4.	Sept. 11.	Sept. 18.	Sept. 25.	Total.
Actinomycosis, ...	–	–	1	–	1
Anterior poliomyelitis, ...	3	2	4	5	14
Cerebro-spinal meningitis, . . .	1	–	2	2	5
Chicken pox, ...	8	8	15	20	51
Diphtheria, ...	103	145	196	153	597
Dog bite (requiring antirabic treatment),	4	2	4	1	11
Dysentery, ...	51	28	35	36	150
German measles, ...	–	2	1	6	9
Infectious diseases of the eye: —					
(*a.*) Ophthalmia neonatorum, . .	61	58	40	42	201
(*b*) Trachoma, ...	2	2	–	–	4
(*c*) Suppurative conjunctivitis, . .	3	2	2	–	7
Malaria, ...	2	1	1	3	7
Measles, ...	68	46	23	42	179
Mumps, ...	24	7	7	5	43
Pellagra, ...	–	–	2	3	5
Scarlet fever, ...	70	74	76	61	281
Septic sore throat, ...	1	–	3	–	4
Tetanus, ...	–	1	–	1	2
Tuberculosis, pulmonary (or not classified), ...	134	125	146	162	567
Tuberculosis, other forms, . . .	17	13	17	11	58
Typhoid fever, ...	77	77	98	69	321
Whooping cough, ...	107	111	95	129	442
	736	704	768	751	2,959

RETURNS OF DEATHS.

DEATHS FROM DISEASES DECLARED BY THE STATE DEPARTMENT OF HEALTH TO BE DANGEROUS TO THE PUBLIC HEALTH.

[Under the provisions of chapter 210, Acts of 1913.]

DISEASE.	WEEK ENDING —				
	Sept. 4.	Sept. 11.	Sept. 18.	Sept. 25.	Total.
Anterior poliomyelitis,	–	–	1	1	2
Cerebro-spinal meningitis,	2	1	2	1	6
Diphtheria,	15	6	11	8	40
Dysentery,	1	2	1	1	5
Measles,	1	1	–	–	2
Tetanus,	1	1	–	1	3
Tuberculosis, pulmonary (or not classified),	51	58	56	37	202
Tuberculosis, other forms,	8	13	10	13	44
Typhoid fever,	6	6	6	3	21
Whooping cough,	6	4	8	4	22
	91	92	95	69	347

WEEKLY RETURNS OF DEATHS FROM DISEASES DECLARED BY THE STATE DEPARTMENT OF HEALTH TO BE DANGEROUS TO THE PUBLIC HEALTH IN CITIES AND TOWNS IN MASSACHUSETTS.

[Under the provisions of chapter 210, Acts of 1913.]

In all cases where the name of a community is not mentioned it signifies that no deaths from these diseases have been reported to this office for the period covered by the table.

Week ending Sept. 4, 1915.

CITIES AND TOWNS.	Population. Census for 1910.	Diphtheria.	Measles.	Scarlet Fever.	Tuberculosis, Pulmonary (or not classified).	Tuberculosis, Other Forms.	Typhoid Fever.	Whooping Cough.
Boston,	686,092	5[1]	–	–	13	3	2	4
Worcester,	145,986	–	–	–	9	3	–	1
Fall River,	119,295	–	1	–	2	–	–	–
Lowell,	106,294	–	–	–	1	–	1	–
Cambridge,	104,839	1	–	–	1	–	–	–
New Bedford,	96,652	–	–	–	1	–	–	–
Lynn,	89,336	–	–	–	1	–	–	–
Springfield,	88,926	1	–	–	–	–	–	–
Lawrence,	85,982	–	–	–	2	1	1	1
Somerville,	77,236	–	–	–	3	–	–	–
Brockton,	56,878	–	–	–	1	–	–	–
Malden,	44,404	1	–	–	–	–	–	–
Haverhill,	44,115	1	–	–	3	–	–	–
Salem,	43,697	–	–	–	1	–	–	–
Fitchburg,	37,826	1	–	–	1	–	–	–
Taunton,	34,259	–	–	–	1	–	–	–
Chelsea,	32,452	–	–	–	1	–	–	–
Waltham,	27,834	1	–	–	2	1	1	–
Northampton,	19,431	–	–	–	1	–	–	–
Beverly,	18,650	–	–	–	–	–	1	–
Leominster,	17,580	1	–	–	–	–	–	–
Peabody,	15,721	–	–	–	1	–	–	–
Woburn,	15,308	–	–	–	1	–	–	–
Clinton,	13,075	–	–	–	2	–	–	–
Natick,	9,866	–	–	–	1	–	–	–
West Springfield,	9,224	2	–	–	–	–	–	–
North Brookfield,	3,075	–	–	–	1	–	–	–
Pepperell,	2,953	1	–	–	–	–	–	–
Erving,	1,148	–	–	–	1	–	–	–
Totals,	–	15	1	–	51	8	6	6

In addition to the above, 1 death occurred from cerebro-spinal meningitis in Boston and 1 in Lawrence; 1 death from dysentery in Boston; and 1 death from tetanus in Lawrence.

[1] Three nonresidents.

Week ending Sept. 11, 1915.

CITIES AND TOWNS.	Population. Census for 1910.	Diphtheria.	Measles.	Scarlet Fever.	Tuberculosis, Pulmonary (or not classified).	Tuberculosis, Other Forms.	Typhoid Fever.	Whooping Cough.
Boston,	686,092	1	–	–	13[1]	4[2]	2	3
Worcester,	145,986	–	–	–	1	1	–	–
Fall River,	119,295	1	–	–	1	–	–	–
Lowell,	106,294	–	–	–	3	1	–	–
Cambridge,	104,839	–	–	–	5	–	–	–
New Bedford,	96,652	–	–	–	3	–	–	–
Lynn,	89,336	–	–	–	2	–	–	–
Springfield,	88,926	–	–	–	1	–	1	–
Lawrence,	85,892	–	1	–	–	–	–	–
Holyoke,	57,730	1	–	–	2	2	–	–
Brockton,	56,878	–	–	–	2	–	–	–
Malden,	44,404	–	–	–	1	–	1	–
Haverhill,	44,115	1	–	–	–	1	–	–
Salem,	43,697	–	–	–	2	1	–	–
Newton,	39,806	–	–	–	2	–	–	–
Taunton,	34,259	–	–	–	1	1	–	–
Everett,	33,484	–	–	–	1	–	–	–
Chelsea,	32,452	–	–	–	–	–	–	1
Brookline,	27,792	1	–	–	–	–	–	–
Medford,	23,150	–	–	–	–	1	–	–
Revere,	18,219	–	–	–	1	–	–	–
Westfield,	16,044	–	–	–	1[1]	–	–	–
Peabody,	15,721	–	–	–	–	1	–	–
Woburn,	15,308	–	–	–	2	–	–	–
Clinton,	13,075	–	–	–	1	–	–	–
Adams,	13,026	–	–	–	–	–	1	–
Weymouth,	12,895	–	–	–	1	–	–	–
North Attleborough,	9,562	–	–	–	1	–	–	–
Danvers,	9,407	–	–	–	1	–	–	–
Middleborough,	8,214	–	–	–	1	–	–	–
Swampscott,	6,204	–	–	–	1	–	–	–
Ipswich,	5,777	–	–	–	1	–	–	–
North Andover,	5,529	–	–	–	2	–	1	–
Barnstable,	4,676	–	–	–	1	–	–	–
Pepperell,	2,953	1	–	–	–	–	–	–
Lakeville,	1,141	–	–	–	4	–	–	–
Totals,	–	6	1	–	58	13	6	4

In addition to the above, 2 deaths occurred from dysentery in Boston; 1 from tetanus (nonresident) in Boston; 1 from cerebro-spinal meningitis in Lawrence.

[1] One nonresident.

[2] Two nonresidents.

Week ending Sept. 18, 1915.

CITIES AND TOWNS.	Population. Census for 1910.	Diphtheria.	Measles.	Scarlet Fever.	Tuberculosis, Pulmonary (or not classified).	Tuberculosis, Other Forms.	Typhoid Fever.	Whooping Cough.
Boston,	686,092	4[1]	–	–	22[2]	4	1[1]	3[1]
Worcester,	145,986	–	–	–	3	1	–	–
Fall River,	119,295	–	–	–	5	–	–	–
Lowell,	106,294	3	–	–	1	–	1	–
Cambridge,	104,839	–	–	–	6	–	–	1
New Bedford,	96,652	1	–	–	–	1	–	–
Lynn,	89,336	1	–	–	3	–	–	–
Springfield,	88,926	–	–	–	4	–	–	–
Lawrence,	85,892	–	–	–	1	1	–	–
Somerville,	77,236	–	–	–	1	–	–	–
Holyoke,	57,730	–	–	–	2	1	–	–
Malden,	44,404	1	–	–	–	–	–	–
Salem,	43,697	–	–	–	–	1	–	–
Newton,	39,806	–	–	–	1	–	–	–
Fitchburg,	37,826	–	–	–	–	–	–	2
Taunton,	34,259	–	–	–	1	–	–	–
Everett,	33,484	–	–	–	–	–	–	1
Waltham,	27,834	–	–	–	1	–	–	–
Chicopee,	25,401	–	–	–	1	–	–	–
Northampton,	19,431	–	–	–	1	–	–	1
Woburn,	15,308	1	–	–	–	–	–	–
Adams,	13,026	–	–	–	–	–	1	–
Wellesley,	5,413	–	–	–	–	1	–	–
Dalton,	3,568	–	–	–	1	–	–	–
Wilbraham,	2,332	–	–	–	–	–	1	–
Rehoboth,	2,001	–	–	–	–	–	1	–
Acushnet,	1,692	–	–	–	–	–	1	–
Lakeville,	1,741	–	–	–	2	–	–	–
Totals,	–	11	–	–	56	10	6	8

In addition to the above, 1 death occurred from anterior poliomyelitis in Boston; 1 from cerebro-spinal meningitis in Lawrence and 1 in Medford; and 1 death from bacillary dysentery in Worcester.

[1] One nonresident.

[2] Three nonresidents.

Week ending Sept. 25, 1915.

CITIES AND TOWNS.	Population. Census for 1910.	Diphtheria.	Measles.	Scarlet Fever.	Tuberculosis, Pulmonary (or not classified).	Tuberculosis, Other Forms.	Typhoid Fever.	Whooping Cough.
Boston,	686,092	1	–	–	14	1	–	1
Worcester,	145,986	–	–	–	–	–	1	1
Fall River,	119,295	–	–	–	1	1	–	–
Lowell,	106,294	1	–	–	–	1	–	–
Cambridge,	104,839	–	–	–	2	1	–	–
New Bedford,	96,652	–	–	–	3	–	1	–
Lynn,	89,336	1	–	–	–	1	–	–
Springfield,	88,926	–	–	–	2	–	–	–
Lawrence,	85,892	–	–	–	1	3	–	1
Somerville,	77,236	–	–	–	1	–	–	–
Holyoke,	57,730	1	–	–	–	–	–	–
Brockton,	56,878	–	–	–	1	–	–	–
Malden,	44,404	–	–	–	1	–	–	–
Haverhill,	44,115	1	–	–	–	–	–	–
Salem,	43,697	–	–	–	–	1	–	–
Fitchburg,	37,826	2	–	–	1	–	–	–
Taunton,	34,259	–	–	–	1	–	–	–
Pittsfield,	32,121	–	–	–	–	2	–	–
Waltham,	27,834	–	–	–	1	1	–	–
Chicopee,	25,401	–	–	–	–	–	1	–
North Adams,	22,019	–	–	–	1	–	–	–
Beverly,	18,650	–	–	–	2	–	–	–
Westfield,	16,044	–	–	–	1[1]	–	–	–
Woburn,	15,308	–	–	–	2	–	–	–
Bridgewater,	7,688	–	–	–	1	–	–	–
Westport,	2,928	–	–	–	–	1	–	–
Somerset,	2,798	1	–	–	–	–	–	–
Wilbraham,	2,332	–	–	–	–	–	–	1
Merrimac,	2,202	–	–	–	1	–	–	–
Totals,	–	8	–	–	37	13	3	4

In addition to the above, 1 death occurred in Boston from tetanus (nonresident); 1 from anterior poliomyelitis in Chicopee; 1 from dysentery in Fall River; and 1 from cerebro-spinal meningitis in Barnstable.

[1] One nonresident.

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PUBLIC HEALTH BULLETIN

ISSUED MONTHLY

BY THE

STATE DEPARTMENT OF HEALTH

OF MASSACHUSETTS

November, 1915

Vol. 2, No. 10

ALLAN J. McLAUGHLIN, M.D., *Commissioner*

The Common Health of the Commonwealth

Entered as Second-class Matter Oct. 26, 1914, at the Post Office at Boston, Mass.,
under the Act of Aug. 24, 1912

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Approved by The State Board of Publication.

THE CONTROL OF DIPHTHERIA.

WE have been given new hope in our fight against diphtheria. Gradually but surely we are acquiring knowledge necessary to successfully control this disease. With the discovery of antitoxin, many people thought that the fight had been won. Unfortunately, the 639 deaths from this cause in Massachusetts last year awakens us to the realization of the necessity for renewed effort.

A new and useful aid has been put into our hands by the laboratory. It has come as the result of the studies of Professor Schick of Vienna. From a long series of experiments he has devised a simple and safe test, which shows whether a given individual is susceptible to diphtheria or not. This will be invaluable in many ways.

The results of its use are already apparent. We are now reasonably certain that 80 per cent. of the new born, 50 to 60 per cent. of children and 90 per cent. of the adults are naturally immune from diphtheria. This throws new light upon the spread of the disease and explains why only certain persons take diphtheria even when exposed to it. This test will show whether a person has sufficient antitoxin in his blood to overcome an infection with diphtheria bacilli.

Some of the other uses of the Schick test can be summarized as follows: —

1. It will enable the practicing physician to diagnose doubtful membranes of the throat.
2. It will enable us to separate the susceptible from the non-susceptible individuals who have been exposed to diphtheria.
3. It will enable us to administer antitoxin to only those who actually need it.
4. It will enable us to prevent the accidents due to serum sickness for we can determine by the use of this test whether a larger amount of antitoxic serum would have any ill effects.
5. It will enable us to lessen the yearly expenditure for unnecessary antitoxin.
6. It will enable us, when diphtheria bacilli are demonstrated in the throat of an apparently well person, to determine whether this person is coming down with the disease or whether he is a "carrier."

It will be seen from these uses that the Schick test has the possibility of a wide range of usefulness. In order to familiarize the medical profession and local health authorities with the nature of the test, Prof. M. J. Rosenau, director of antitoxin and vaccine laboratory, has prepared a detailed description of this test, which will be found below.

THE SCHICK REACTION.

Prof. M. J. Rosenau, *Director, Antitoxin and Vaccine Laboratory, State Department of Health.*

THE Schick reaction is a skin test used to determine whether the individual examined is immune or susceptible to diphtheria.

The Schick test is made by injecting a small amount of diphtheria toxin into the skin. The amount injected is one-fiftieth of a minimum lethal dose for a 250-gram guinea pig. The injection must be made *into* and not under the skin. The toxin is diluted with salt solution so that the correct amount to be injected is contained in just 0.1 cubic centimeter. Use a good 1 cubic centimeter tuberculin syringe graduated in tenths and a fine platiniridium or steel needle. The operator should be skilled in the intracutaneous method of injecting.

If the blood of the individual tested contains diphtheria antitoxin there will be no reaction at the site of the injection, for the reason that the toxin is at once neutralized by the antitoxin. The absence of reaction, therefore, signifies the presence of antitoxin; such persons are immune to diphtheria; they may, however, become bacillus carriers. The presence of reaction indicates the absence of antitoxin; such persons are susceptible to diphtheria.

If the injection has been properly made a small wheal-like elevation appears, which shows the distinct markings of the openings of the hair follicles. This distension persists for two or three minutes.

A *positive* reaction appears in from twenty-four to forty-eight hours, as a distinctly circumscribed area of redness and slight infiltration, which measures from 1 to 2.5 centimeters in diameter. The redness increases in intensity during the next three or four days, persists for another week, and on fading gradually gives place to a brownish pigmentation, which always shows superficial scaling. The true reaction is characteristic of the irritant action of toxin on tissue cells when there is no antitoxin to protect them. In the case of a *negative* reaction, which indicates an antitoxin immunity to diphtheria, the skin remains normal in appearance.

A *pseudo-reaction* is seen occasionally in older children and in adults. This is not due to the irritant action of toxin, but is an anaphylactic response of the skin to the protein substance of the diphtheria bacillus present in solution in the broth used in making the toxin. Such a reaction can also be obtained with a dilution of the autolysate of the diphtheria bacillus, in which no toxin is present. The pseudo-reaction can generally be distinguished clinically from the true reaction; it appears earlier, is less sharply circumscribed, and usually disappears in from three to four days. It is characterized by a central area of redness of varying size, surrounded by a secondary areola. On fading it leaves only a faintly pigmented area, which soon becomes invisible. It will be safer, for those insufficiently experienced, to regard pseudo-reactions as true reactions.

It is important that the toxin be kept cold (on the ice) and should be used within seventy-two hours after the date of preparation, which is marked on the label.

Note. — The department is not yet prepared to send out the materials for the Schick test for general distribution. For the present, arrangements can be made for the application of the test through the State district health officer of any particular district.

MORTALITY OF THE INDUSTRIAL POPULATION OF MASSACHUSETTS.

Louis I. Dublin, Ph.D., New York.

MASSACHUSETTS is an industrial State. The principal facts in the mortality experience of the industrial insurance companies should, therefore, be of interest because these companies reach the great majority of the working people of the State. The Metropolitan Life Insurance Company, for example, in the year 1914, had insured one out of every six persons in Massachusetts. This company in that year alone paid 10,871 claims on the lives of 7,273 white and colored persons.

This number of deaths corresponds to a death rate of 12.6 per thousand exposed in the experience of the insurance company; in the general population of the State, one year of age and over, the death rate was 12.5 per thousand for the year 1913 (the last year for which figures are available). The two mortality experiences are, therefore, practically identical, and the surprising fact is established that the industrial population, in so far as mortality is concerned, is very representative of the population at large.

In like manner the Metropolitan Life experience for the principal causes of death parallels closely that for the population at large, as is shown in the following table: —

TABLE I. — *Metropolitan Life Insurance Company, Industrial Department. Mortality Experience, 1914. Deaths and Proportions of Death from Principal Causes, State of Massachusetts.*

[Death rate per 1,000: Metropolitan Life Insurance Company, 12.6; population one year of age and over, 12.5.]

CAUSE OF DEATH.	METROPOLITAN LIFE INSURANCE COMPANY, EXPERIENCE, INDUSTRIAL DEPARTMENT, 1914.		GENERAL POPULATION, ONE YEAR OF AGE AND OVER, 1913.	
	Number of Deaths.	Per Cent. of Total.	Number of Deaths.	Per Cent. of Total.
All causes, ...	7,273	100.0	43,315	100.0
Typhoid fever, ...	40	.5	278	.6
Measles, scarlet fever, whooping cough, diphtheria and croup, . . .	262	3.6	1,372	3.2
Tuberculosis of the lungs, ...	978	13.4	4,142	9.6
Cancer, all forms, ...	576	7.9	3,593	8.3
Organic diseases of the heart, . .	1,104	15.2	6,458	14.9
Pneumonia, all forms, ...	677	9.3	4,173	9.6
Nephritis and Bright's disease, . .	572	7.9	3,182	7.3
Violent deaths, ...	490	6.7	3,243	7.5

The mortality from typhoid fever is very low in Massachusetts among the insured and in the general population. This is no doubt due to the large amount of attention that has been paid, in recent years, to the care of the water supplies of the State. The infectious diseases of children, including measles, scarlet fever, whooping cough and diphtheria, show a somewhat higher proportionate representation among the insured, 3.6 per cent. as against 3.2 per cent. of all the deaths. The difference is hardly significant. In the same way only slight differences are found in the proportionate representation of cancer, pneumonia, and Bright's disease in the two groups.

Tuberculosis of the lungs shows a much higher representation in the insured than in the population at large. Among the former, 13.4 per cent. of the deaths were from this cause, while in the latter the corresponding figure was only 9.6 per cent. of the total deaths. This is an important difference, and may be directly charged to the greater life strain to which the industrial classes of the community are subjected. Tuberculosis mortality is especially significant because it affects the main working period of life, the average age of those dying from tuberculosis being thirty-seven years.

The organic diseases of the heart are the chief cause of death in Massachusetts, both in the insured public and in the State population. About 15 per cent. of all the deaths were from this cause, although the proportion is only 12 per cent. in the general experience of the company, and about 10 per cent. in the registration area of the United States. The organic heart diseases present a serious problem for solution to the public health authorities of the State; the more advanced medical men of Massachusetts have long been aware of the growing menace from these diseases.

Table II. — *Metropolitan Life Insurance Company, Industrial Department. Mortality Experience, 1914. Deaths and Proportions of Death from Principal Causes, Leading Cities of Massachusetts.*

Boston (*White Lives*).

[Death rate per 1,000: Metropolitan Life Insurance Company, 14.1; population one year of age and over, 13.6.]

CAUSE OF DEATH.	Metropolitan Life Insurance Company, Experience, Industrial Department, 1914.		General Population, One Year of Age and Over, 1913.	
	Number of Deaths.	Per Cent. of Total.	Number of Deaths.	Per Cent. of Total.
All causes, ...	1,804	100.0	9,406	100.0
Typhoid fever, ...	11	.6	58	.6
Measles, scarlet fever, whooping cough, diphtheria and croup, ...	58	3.2	310	3.3
Tuberculosis of the lungs, ...	245	13.6	971	10.3
Cancer, all forms, ...	150	8.3	823	8.7
Organic diseases of the heart, . .	315	17.5	1,469	15.6
Pneumonia, all forms, ...	176	9.8	1,064	11.3
Nephritis and Bright's disease, . .	137	7.6	632	6.7
Violent deaths, ...	125	6.9	850	9.0

Fall River.

[Death rate per 1,000: Metropolitan Life Insurance Company, 15.6; population one year of age and over, 11.9.]

All causes, ...	408	100.0	1,440	100.0
Typhoid fever, ...	–	–	11	.8
Measles, scarlet fever, whooping cough, diphtheria and croup, ...	10	2.5	118	8.2
Tuberculosis of the lungs, ...	54	13.2	157	10.9
Cancer, all forms, ...	20	4.9	93	6.5
Organic diseases of the heart, . .	71	17.4	175	12.2
Pneumonia, all forms, ...	28	6.9	201	14.0
Nephritis and Bright's disease, . .	54	13.2	111	7.7
Violent deaths, ...	26	6.4	58	4.0

TABLE II. — *Concluded.*

LOWELL.

[Death rate per 1,000: Metropolitan Life Insurance Company, 14.0; population one year of age and over, 12.4.]

CAUSE OF DEATH.	METROPOLITAN LIFE INSURANCE COMPANY, EXPERIENCE, INDUSTRIAL DEPARTMENT, 1914.		GENERAL POPULATION, ONE YEAR OF AGE AND OVER, 1913.	
	Number of Deaths.	Per Cent. of Total.	Number of Deaths.	Per Cent. of Total.
All causes,	309	100.0	1,329	100.0
Typhoid fever,	2	.6	11	.8
Measles, scarlet fever, whooping cough, diphtheria and croup,	7	2.3	53	4.0
Tuberculosis of the lungs,	34	11.0	98	7.4
Cancer, all forms,	16	5.2	82	6.2
Organic diseases of the heart,	52	16.8	145	10.9
Pneumonia, all forms,	36	11.7	123	9.3
Nephritis and Bright's disease,	18	5.8	124	9.3
Violent deaths,	13	4.2	83	6.2

WORCESTER.

[Death rate per 1,000: Metropolitan Life Insurance Company, 13.1; population one year of age and over, 13.6.]

CAUSE OF DEATH.	Number of Deaths.	Per Cent. of Total.	Number of Deaths.	Per Cent. of Total.
All causes,	311	100.0	2,064	100.0
Typhoid fever,	–	–	9	.4
Measles, scarlet fever, whooping cough, diphtheria and croup,	8	2.6	62	3.0
Tuberculosis of the lungs,	37	11.9	161	7.8
Cancer, all forms,	30	9.6	173	8.4
Organic diseases of the heart,	67	21.5	314	15.2
Pneumonia, all forms,	29	9.3	211	10.2
Nephritis and Bright's disease,	23	7.4	118	5.7
Violent deaths,	21	6.8	164	7.9

An encouraging fact is the relatively low mortality from the violent causes of death, 6.7 per cent. in the experience of the company and 7.5 per cent. in that of the population. In view of the large industrial development of the State these low figures may be interpreted to show the effect of the careful sanitary inspection of factories and the fine co-operation of employers with the State authorities in the movement for accident prevention.

Equally interesting is Table II., which presents in some detail the experience of the Metropolitan Life Insurance Company in the four largest cities of the State, namely, Boston, Fall River, Lowell and Worcester. Comparative figures for the populations in these cities are also given. As in the State as a whole we find that the organic diseases of the heart are the chief cause of death. The city of Worcester shows the very worst condition in this respect, 21.5 per cent. of the total deaths among the insured and 15.2 per cent. of the deaths in the general population being caused by them.

In each of the cities tuberculosis is more highly represented among the insured than in the general population. The highest representation is in Boston, where 13.6 per cent. of the deaths of the insured were from this cause. In the general population the proportion was only 10.3 per cent. of all the deaths.

The infectious diseases of children are about equally represented among the insured and in the general population, except in Fall River, where they formed only 2.5 per cent. of deaths among the insured and 8.2 per cent. of deaths in the general population. This condition may well call for the attention of the health authorities of the State and city.

The mortality among the wage-earning classes of the country at the productive years of life is a matter of great interest to the executives of the Metropolitan Life Insurance Company, and they have in recent years inaugurated a campaign of education against the preventable diseases, and have instituted a system of visiting nursing of sick policyholders. It has been demonstrated that this applied preventive work, in conjunction with the efforts of the general community, has resulted in lowering the death rate in the Industrial Department, both for white and colored lives. In the experience of the company as a whole the mortality has dropped 7.8 per cent. among white lives and 3.8 per cent. among colored lives in the last three years. Such results as this give great encouragement to the further extension and development of live conservation work on the part of insurance companies.

RÉSUMÉ OF COMMUNICABLE DISEASES FOR OCTOBER, 1915.

THERE has been an increase in the number of cases of communicable diseases for the month of October. This increase is an annual event. It is always coincident with the opening of the public schools. In comparison with the same month last year the total of communicable diseases reported to the boards of health shows considerable increase. An analysis of the reports shows that the greater prevalence of whooping cough in various parts of the State is largely responsible for this increase.

Whooping cough has been prevalent in many parts of the State. The difficulty of early diagnosis and efficient quarantine in this disease is largely responsible for its continued spread. Some practical work is being done by the New York city department of health as to the use of a vaccine for this disease. Results of their studies will, no doubt, soon give out some important facts to help us in our control of this infection. While there have been no epidemics in any particular city or town, in a few places it has been particularly prevalent. Among those places may be mentioned Cambridge, Provincetown, Chelsea, Lawrence, Waltham, Natick, Northampton, and Whately. Springfield has been having a considerable number of cases for several months, but they seem to be decreasing.

The diphtheria situation is of interest. A comparison with October, 1914, shows that there are about the same number of cases this year. One fact worthy of note is that they do not seem to be so fatal this year. The fatality rate last year was 6.7, and this year 3.8. While this is gratifying it is no insurance that the infection may not become virulent at any time. There have been no marked epidemics of diphtheria during the month. However, the disease has been unusually prevalent in the following cities and towns: Attleboro, New Bedford, Haverhill, Malden, Rockport, Saugus, Lawrence, Lowell, Waltham, Fitchburg, Hudson, Leominster, Shirley and Agawam.

The spread of diphtheria seems to be most common along certain lines. The comment by one of the district health officers in reporting a diphtheria investigation seems to apply almost generally to the State. He says, "This outbreak shows the usual cycle of unrecognized cases with the physician called late, the extension of the disease by contact with others in the immediate neighborhood, and the spread of the disease in the school." An analysis of the reports coming to the Department show that this seems to be true in almost all of the outbreaks reported. The common practice of closing the schools is not so effective as keeping them open, when adequate medical inspection of the schools can be made daily. Our more exact knowledge of the disease and more scientific use of the culture method, plus the application of the Schick test, should enable us to work out a more efficient procedure in controlling this disease.

The typhoid fever situation continues to be favorable. There is some increase over September. In this disease the fatality seems to be slightly higher than for the same month last year. The following cities and towns have had more typhoid fever than usual: Pittsfield, Somerville, Lexington, Quincy, Bridgewater, Northbridge, Chelsea and Lowell.

Two particular foci are of interest. Northbridge has had an epidemic of 18 cases, in which the result of the investigation seems to point to the milk supply of one man. However, in this outbreak there is a possibility of water-born infection. For fire purposes polluted water is pumped through the domestic water-supply mains.

Mansfield continues to have some cases of typhoid fever. The beginning of the prevalence of typhoid fever in this town dates back about two years. As in the former epidemic the mode of transmission is probably milk. The evidence seems to point to the infection coming from a carrier of forty-five years' standing.

VACCINATION CERTIFICATES.

THE COMMONWEALTH OF MASSACHUSETTS,
DEPARTMENT OF THE ATTORNEY-GENERAL,
BOSTON, Oct. 22, 1915.

EUGENE R. KELLEY, M.D., *Director of Division of Communicable Diseases.*

DEAR SIR: — Two queries have been presented by you for the consideration of this Department relative to vaccination, as follows: —

> May a school board require a certificate from the local board of health only as the prerequisite for readmission to school following an infectious or contagious disease?
>
> In what manner may children be admitted to school on "exemption certificates"?

St. 1907, c. 215, which is the latest legislative enactment on the subject of vaccination, is in part as follows: —

> A child who has not been vaccinated shall not be admitted to a public school except upon presentation of a certificate granted for cause stated therein, signed by a regular practising physician that he is not a fit subject for vaccination. A child who is a member of a household in which a person is ill with smallpox, diphtheria, scarlet fever, measles, or any other infectious or contagious disease, or of a household exposed to such contagion from another household as aforesaid, shall not attend any public school during such illness until the teacher of the school has been furnished with a certificate from the board of health of the city or town, or from the attending physician of such person, stating that danger of conveying such disease by such child has passed.

A careful reading of this statute would seem to warrant the opinion that either the "board of health of the city or town" or the "attending physician of such person" is authorized to grant the required certificate. As the Legislature has thus authorized the attending physician to grant the certificate it is not within the power of the school committee of a city or town to prevent the attendance of a child at school when such certificate is presented.

In answer to your second query I am of the opinion that a regular practicing physician may issue an "exemption certificate" which will authorize school attendance by a child who has not been vaccinated, if such certificate recites that, for some cause therein stated, .the child is not a fit subject for vaccination.

The answer to this question raises two others: (1) Who is a regular practicing physician? (2) How often may these certificates be required?

R. L., c. 76, sects. 1 to 9, deal with the registration of physicians and surgeons. After providing for such registration and penalties for a violation thereof, the statute provides that the provisions of the chapter shall not apply —

> . . . to a physician or surgeon from another state who is a legal practitioner in the state in which he resides, when in actual consultation with a legal practitioner of this commonwealth; to a physician or surgeon residing in another state and legally qualified to practice therein, whose general practice extends into the border towns of this commonwealth, if such physician does not open an office or designate a place in such towns where he may meet patients or receive calls; to a physician authorized to practice medicine in another state, when he is called as the family physician to attend a person temporarily abiding in this commonwealth; . . .

It is my opinion, therefore, that a regular practicing physician is any one mentioned in the foregoing classification, and that such persons may issue the so-called "exemption certificates."

An exemption certificate once issued does not create an exemption for all time, and it is my opinion that the authorities may, after a reasonable period, require a new certificate in order to continue the exemption. What such reasonable time may be largely depends on the circumstances of each case, which should include the apparent satisfactory physical condition of the child.

Yours truly,

HENRY C. ATTWILL,
Attorney-General.

RETURNS OF DISEASES.

Cases of Diseases declared by the State Department of Health to be Dangerous to the Public Health.

[Under the provisions of section 52 of chapter 75 of the Revised Laws.]

DISEASE.	Week ending —					
	Oct. 2.	Oct. 9.	Oct. 16.	Oct. 23.	Oct. 30.	Total.
Anterior poliomyelitis,	6	8	9	3	4	30
Anthrax,	–	–	–	1	1	2
Cerebro-spinal meningitis,	6	2	2	3	2	15
Chicken pox,	12	16	28	44	78	178
Diphtheria,	242	236	266	203	276	1,223
Dog bite (requiring antirabic treatment),	3	8	1	4	–	16
Dysentery,	8	6	–	3	2	19
German measles,	–	3	1	–	3	7
Glanders,	1	–	–	–	–	1
Infectious diseases of the eye: —						
(*a*) Ophthalmia neonatorum,	31	34	34	34	40	173
(*b*) Trachoma,	2	–	2	2	1	7
(*c*) Suppurative conjunctivitis,	7	8	6	3	5	29
Malaria,	5	6	–	1	2	14
Measles,	46	55	59	97	104	361
Mumps,	10	12	9	15	26	72
Scarlet fever,	74	116	103	103	84	480
Septic sore throat,	5	4	2	3	1	15
Tetanus,	1	1	–	–	–	2
Tuberculosis, pulmonary (or not classified),	154	173	131	139	135	732
Tuberculosis, other forms,	16	21	19	15	14	85
Typhoid fever,	70	82	117	98	73	440
Whooping cough,	99	102	109	184	155	649
	798	893	898	955	1,006	4,550

RETURNS OF DEATHS.

Deaths from Diseases declared by the State Department of Health to be Dangerous to the Public Health.

[Under the provisions of chapter 210, Acts of 1913.]

DISEASE.	Week ending —					
	Oct. 2.	Oct. 9.	Oct. 16.	Oct. 23.	Oct. 30.	Total.
Anterior poliomyelitis,	–	2	–	–	1	3
Cerebro-spinal meningitis,	4	3	–	4	1	12
Diphtheria,	8	7	11	8	18	52
Dysentery,	1	–	–	–	–	1
Chicken pox,	–	–	–	1	–	1
Measles,	1	–	1	–	3	5
Scarlet fever,	1	–	2	–	1	4
Septic sore throat,	–	–	–	1	–	1
Tetanus,	–	2	–	–	–	2
Tuberculosis, pulmonary (or not classified),	61	48	47	47	55	258
Tuberculosis, other forms,	12	6	7	19	11	55
Typhoid fever,	8	4	5	10	7	34
Whooping cough,	7	9	6	3	8	33
	103	81	79	93	105	461

WEEKLY RETURNS OF DEATHS FROM DISEASES DECLARED BY THE STATE DEPARTMENT OF HEALTH TO BE DANGEROUS TO THE PUBLIC HEALTH IN CITIES AND TOWNS IN MASSACHUSETTS.

[Under the provisions of chapter 210, Acts of 1913.]

In all cases where the name of a community is not mentioned it signifies that no deaths from disease have been reported to this office for the period covered by the table.

Week ending Oct. 2, 1915.

CITIES AND TOWNS.	Population. Census for 1910.	Diphtheria.	Measles.	Scarlet Fever.	Tuberculosis, Pulmonary (or not classified).	Tuberculosis, Other Forms.	Typhoid Fever.	Whooping Cough.
Boston,	686,092	4[1]	–	1[2]	17[2]	1	–	3
Worcester,	145,986	1	–	–	3	2	1	2
Fall River,	119,295	–	1	–	3	–	–	–
Lowell,	106,294	–	–	–	3	2	2	1
Cambridge,	104,839	–	–	–	4	–	–	1
New Bedford,	96,652	–	–	–	3	–	1	–
Lynn,	89,336	–	–	–	3	–	–	–
Springfield,	88,926	–	–	–	1	1	–	–
Lawrence,	85,892	–	–	–	2	–	1	–
Somerville,	77,236	–	–	–	1	1	–	–
Holyoke,	57,730	–	–	–	2	–	–	–
Malden,	44,404	1	–	–	–	–	–	–
Haverhill,	44,115	1	–	–	1	1	–	–
Fitchburg,	37,826	–	–	–	2	–	–	–
Taunton,	34,259	–	–	–	1	–	–	–
Chelsea,	32,452	–	–	–	–	–	1	–
Waltham,	27,834	1	–	–	1	–	1	–
Brookline,	27,792	–	–	–	–	1	–	–
Medford,	23,150	–	–	–	1	–	–	–
Northampton,	19,431	–	–	–	1	1	1	–
Westfield,	16,044	–	–	–	2[2]	–	–	–
Woburn,	15,308	–	–	–	1	–	–	–
Clinton,	13,075	–	–	–	2	–	–	–
Webster,	11,509	–	–	–	1	–	–	–
Natick,	9,866	–	–	–	1	–	–	–
Braintree,	8,066	–	–	–	1	–	–	–
Saugus,	8,047	–	–	–	1	–	–	–
Ludlow,	4,948	–	–	–	–	1	–	–
Lexington,	4,918	–	–	–	2	–	–	–
Barnstable,	4,676	–	–	–	1	–	–	–
Warren,	4,188	–	–	–	–	1	–	–
Totals,	–	8	1	1	61	12	8	7

In addition to the above, 1 death from cerebro-spinal meningitis was reported from Boston, 1 from Lynn, 1 from Medford and 1 from Pittsfield; and 1 death from dysentery from Foxborough.

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[1] Two nonresidents.

[2] One nonresident.

Week ending Oct. 9, 1915.

CITIES AND TOWNS.	Population. Census for 1910.	Diphtheria.	Measles.	Scarlet Fever.	Tuberculosis, Pulmonary (or not classified).	Tuberculosis, Other Forms.	Typhoid Fever.	Whooping Cough.
Boston,	686,092	3	–	–	15[1]	3[1]	2[1]	7
Lowell,	106,294	–	–	–	1	2	1	–
Cambridge,	104,839	–	–	–	5	–	–	–
New Bedford,	96,652	–	–	–	5	–	–	–
Lynn,	89,336	–	–	–	1	–	–	–
Springfield,	88,926	–	–	–	–	–	–	–
Lawrence,	85,892	–	–	–	1	–	–	–
Holyoke,	57,730	–	–	–	3	–	–	–
Brockton,	56,878	–	–	–	3	–	–	–
Malden,	44,404	–	–	–	1	–	–	1
Everett,	33,484	–	–	–	1	–	–	–
Chelsea,	32,452	–	–	–	2	–	–	–
Pittsfield,	32,121	–	–	–	2	1	–	–
Waltham,	27,834	1	–	–	1	–	–	1
Brookline,	27,792	–	–	–	1	–	–	–
Chicopee,	25,401	–	–	–	2	–	–	–
Northampton,	19,431	1	–	–	–	–	–	–
Beverly,	18,650	–	–	–	1	–	–	–
Clinton,	13,075	–	–	–	1	–	–	–
Arlington,	11,187	1	–	–	1	–	–	–
Maynard,	6,390	1	–	–	–	–	–	–
Barnstable,	4,676	–	–	–	–	–	1	–
Foxborough,	3,863	–	–	–	1	–	–	–
Totals,	–	7	–	–	48	6	4	9

In addition to the above, 2 deaths from cerebro-spinal meningitis were reported from Boston (1 nonresident) and 1 from Easthampton; 1 death from tetanus was reported from Boston and 1 from Lawrence; 1 death from anterior poliomyelitis was reported from Lowell and 1 from New Bedford.

[1] One nonresident.

Week ending Oct. 16, 1915.

CITIES AND TOWNS.	Population. Census for 1910.	Diphtheria.	Measles.	Scarlet Fever.	Tuberculosis, Pulmonary (or not classified).	Tuberculosis, Other Forms.	Typhoid Fever.	Whooping Cough.
Boston,	686,092	1	–	1[1]	16	4[2]	3[2]	4
Worcester,	145,986	–	–	–	1	–	1	–
Fall River,	119,295	–	–	–	1	–	–	–
Lowell,	106,294	1	–	–	1	–	1	–
Cambridge,	104,839	–	–	–	3	1	–	2
New Bedford,	96,652	1	–	–	2	1	–	–
Lynn,	89,336	1	–	–	4	–	–	–
Springfield,	88,926	–	–	–	1	–	–	–
Lawrence,	85,892	–	–	–	2	1	–	–
Somerville,	77,236	–	–	–	3	–	–	–
Holyoke,	57,730	–	–	–	1	–	–	–
Brockton,	56,878	1	–	–	–	–	–	–
Malden,	44,404	1	–	–	–	–	–	–
Haverhill,	44,115	–	–	–	1	–	–	–
Fitchburg,	37,826	2	–	–	2	–	–	–
Taunton,	34,259	–	–	–	2	–	–	–
Everett,	33,484	1	–	–	–	–	–	–
Pittsfield,	32,121	–	–	–	1	–	–	–
Waltham,	27,834	–	1	–	2	–	–	–
Chicopee,	25,401	–	–	–	1	–	–	–
Medford,	23,150	–	–	–	1	–	–	–
Attleboro,	16,215	1	–	–	–	–	–	–
Westfield,	16,044	–	–	–	1[1]	–	–	–
West Springfield,	9,224	1	–	–	–	–	–	–
Winchendon,	5,678	–	–	–	1	–	–	–
Wilbraham,	2,332	–	–	1	–	–	–	–
Totals,	–	11	1	2	47	7	5	6

[1] One nonresident.

[2] Two nonresidents.

Week ending Oct. 23, 1915.

CITIES AND TOWNS.	Population. Census for 1910.	Diphtheria.	Measles.	Scarlet Fever.	Tuberculosis, Pulmonary (or not classified).	Tuberculosis, Other Forms.	Typhoid Fever.	Whooping Cough.
Boston,	686,092	2	–	–	12[1]	5	–	–
Worcester,	145,986	1	–	–	4	1	–	–
Fall River,	119,295	1	–	–	1	–	–	–
Lowell,	106,294	1	–	–	2	–	1	–
Cambridge,	104,839	–	–	–	4	1	–	–
New Bedford,	96,652	1	–	–	2	2	2	1
Lynn,	89,336	–	–	–	2	1	–	–
Springfield,	88,926	–	–	–	1	–	–	1
Lawrence,	85,892	1	–	–	2	2	–	–
Somerville,	77,236	–	–	–	1	1	2	–
Brockton,	56,878	–	–	–	1	–	1	–
Malden,	44,404	–	–	–	–	1	–	–
Salem,	43,697	–	–	–	–	1	–	–
Fitchburg,	37,826	1	–	–	1	1	–	–
Taunton,	34,259	–	–	–	2	–	–	–
Everett,	33,484	–	–	–	1	–	–	–
Chelsea,	32,452	–	–	–	1	1	–	–
Pittsfield,	32,121	–	–	–	3	1	–	–
Waltham,	27,834	–	–	–	1	–	–	–
North Adams,	22,019	–	–	–	1	–	–	–
Northampton,	19,431	–	–	–	–	–	–	1
Westfield,	16,044	–	–	–	1[1]	–	–	–
Methuen,	11,448	–	–	–	1	–	–	–
Northbridge,	8,807	–	–	–	–	–	3	–
Bridgewater,	7,688	–	–	–	1	–	–	–
Barnstable,	4,676	–	–	–	–	1	–	–
Wilbraham,	2,332	–	–	–	–	–	1	–
Brookfield,	2,204	–	–	–	1	–	–	–
Sunderland,	1,047	–	–	–	1	–	–	–
Totals,	–	8	–	–	47	19	10	3

In addition to the above, 1 death from septic sore throat was reported from Boston, 1 from chicken pox and 1 from cerebro-spinal meningitis; also, 1 death from cerebro-spinal meningitis from Fall River, 1 from Somerville and 1 from Lawrence.

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[1] One nonresident.

Week ending Oct. 30, 1915.

CITIES AND TOWNS.	Population. Census for 1910.	Diphtheria.	Measles.	Scarlet Fever.	Tuberculosis, Pulmonary (or not classified).	Tuberculosis, Other Forms.	Typhoid Fever.	Whooping Cough.
Boston,	686,092	1	1	–	16[1]	1	–	5
Worcester,	145,986	2	–	–	4	–	1	2
Fall River,	119,295	–	–	–	4	–	–	–
Lowell,	106,294	3	–	–	2	–	1	–
Cambridge,	104,839	–	–	–	3	1	–	–
New Bedford,	96,652	1	–	–	3	–	1	–
Lynn,	89,336	2	–	–	1	–	–	–
Springfield,	88,926	1	–	–	1	2	–	–
Lawrence,	85,892	1	1	1	1	2	–	1
Somerville,	77,236	–	–	–	1	–	–	–
Holyoke,	57,730	1	–	–	2	1	–	–
Brockton,	56,878	–	–	–	2	–	–	–
Haverhill,	44,115	1	–	–	1	–	–	–
Salem,	43,697	–	–	–	2	–	–	–
Newton,	39,806	1	–	–	–	1	–	–
Fitchburg,	37,826	2	–	–	–	–	–	–
Taunton,	34,259	1	–	–	–	–	–	–
Everett,	33,484	–	–	–	1	–	–	–
Chelsea,	32,452	–	–	–	1	–	–	–
Pittsfield,	32,121	–	–	–	2	–	–	–
Waltham,	27,834	–	–	–	–	–	1	–
Brookline,	27,792	–	1	–	1	–	–	–
Chicopee,	25,401	–	–	–	1	–	–	–
Northampton,	19,431	–	–	–	1	3	–	–
Beverly,	18,650	–	–	–	–	–	1	–
Westfield,	16,044	–	–	–	1[1]	–	–	–
Woburn,	15,308	1	–	–	–	–	–	–
Clinton,	13,075	–	–	–	1	–	–	–
Framingham,	12,948	–	–	–	–	–	1	–
North Attleborough,	9,562	–	–	–	1	–	–	–
Norwood,	8,014	–	–	–	1	–	–	–
Bridgewater,	7,688	–	–	–	1	–	–	–
Marshfield,	1,738	–	–	–	–	–	1	–
Totals,	–	18	3	1	55	11	7	8

In addition to the above, 1 death from cerebro-spinal meningitis was reported from Watertown and 1 from anterior poliomyelitis from Springfield.

[1] One nonresident.

REPORT OF THE BACTERIOLOGICAL LABORATORY FOR THE MONTH OF OCTOBER, 1915.

The following gives the total number of bacteriological examinations made in the laboratory of the State Department of Health during the month of October, 1915: —

	Number of Examinations.	Diagnosis.		Release.	
		Positive.	Negative.	Positive.	Negative.
Diphtheria,	2,379	178	1,769	127	305

	Number of Examinations.	Positive.	Negative.	*Atypical.
Tuberculosis,	273	59	214	
*Typhoid fever (Widal test),	434	93	321	21
Typhoid fever (culture test),	70	7	63	
Malaria,	5	1	4	
Miscellaneous,	93			

Total number of examinations made, 3,254.

The following gives the total number of biological products and diagnostic outfits distributed by the State Department of Health during the month of October, 1915: —

Biological Products.

Diphtheria antitoxin: —	
12,000 units (special for the Boston City Hospital),	177 bottles.
6,000 units (special for the Boston City Hospital),	48 bottles.
3,000 units,	4,699 bottles.
1,500 units,	1,467 bottles.
750 units,	632 bottles.
Smallpox vaccine,	8,872 tubes.
Typhoid vaccine,	3,270 ampoules.
Antimeningitis serum,	60 bottles.
Silver nitrate solution,	236 droppers.

Diagnostic Outfits.

Culture tubes,	2,912
Culture media,	74
Sputum bottles,	409
Widal outfits,	533
Bile outfits,	81
Malaria outfits,	23

FOOD AND DRUGS.

The following tables present the results of the laboratory examinations of samples of food and drugs collected during the month of October, 1915: —

The cities and towns in which samples were collected were: Andover, Arlington, Attleboro, Ayer, Barnstable, Boston, Braintree, Brookline, Cambridge, Canton, Chatham, Chelsea, Danvers, Dennis, Dover, Dracut, Everett, Fall River, Framingham, Gloucester, Grafton, Hingham, Holyoke, Ipswich, Lancaster, Lawrence, Leominster, Lexington, Lowell, Lynn, Melrose, Milford, Natick, Needham, New Bedford, Newton, Palmer, Peabody, Plymouth, Quincy, Rockland, Salem, Southbridge, Taunton, Waltham, Warren, Westborough, Westport, Winchendon and Worcester.

SUMMARY OF ANALYSES.

ARTICLES EXAMINED.	Number found to be of Good Quality.	Number adulterated or varying from the Legal Standard.	Total.
Butter, [1]	4	–	4
Cider, ...	1	–	1
Coffee, ...	1	–	1
Confectionery, ...	3	–	3
Cream, ...	9	–	9
Drugs, ...	30	13	43
Fish, ...	2	1	3
Flavoring extracts: —			
Pineapple, ...	1	–	1
Vanilla, ...	1	3	4
Honey, ...	1	–	1
Horse radish, ...	1	–	1
Ice cream, ...	7	–	7
Jams and jellies, ...	6	–	6
Meat products: —			
Hamburg steak, ...	2	–	2
Sausages, ...	42	11	53
Milk, ...	509	96	605
Molasses, ...	18	–	18
Scallops, ...	34	23	57
Shredded cocoanut, ...	1	–	1
Shrimp, ...	–	1	1
Tomato soup, ...	1	–	1
Totals, ...	674	148	822

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[1] Taken from cold storage.

PROSECUTIONS FOR VIOLATIONS OF THE LAW RELATING TO FOOD AND DRUGS.

Eighteen convictions were secured during the month of October, 1915, for the sale of adulterated food, and for violation of the cold storage and slaughtering laws, as follows: —

NAME OF DEFENDANT.	Place.	Character of Article sold or Nature of Offence.
Francis Burnham,	Ipswich,	Milk (total solids, 11.80).[1]
Kostonly Chemalska,	Chelmsford,	Milk (total solids, 11.08).[2]
Llewellyn F. Gates,	Westford,	Milk (total solids, 8.94).[2, 3]
Clarence Phinney,	Hyannis,	Milk (total solids, 11.60).[2, 3]
Harry H. Roper,	Ipswich,	Milk (total solids, 10.86).[2, 3]
Manuel Cabral,[4]	Cotuit,	Milk (total solids, 11.22).[2]
Warren Codd,[4]	Osterville,	Milk (total solids, 12.78).[2]
Frank Frazier,[4]	Santuit,	Milk (total solids, 10.86).[2]
George O. Woodbury,[4]	Hyannis,	Milk (total solids, 10.40).[2]
Louis Isenberg,	Boston,	Orangeade (contained benzoic acid).[3]
Fred E. Colman,	Boston,	Vanilla extract (mixed with a solution of vanillin).
Joseph J. MacFarlane,	Boston,	Holding articles of food in cold storage longer than twelve months without consent of State Department of Health.
Joseph J. MacFarlane,	Boston,	Selling cold storage food as fresh goods.
Joseph J. MacFarlane,	Boston,	Returning cold storage goods to cold storage under new lot after they had been exposed for sale.
Max Goldman,	Webster,	Slaughtering without inspector present.
Lester Witt,	Marlborough,	Slaughtering without inspector present.
Harry Wolf,	Webster,	Slaughtering without inspector present.
Max Katz,	North Adams,	Slaughtering without inspector present.

[1] Skimmed. [2] Watered. [3] Appealed.

[4] Prosecution carried on in collaboration with Mr. George T. Mecarta, milk inspector of Barnstable, Mass.

Fines imposed, $695.

SAMPLES OF FOOD WHICH UPON EXAMINATION WERE FOUND TO BE ADULTERATED.

VANILLA EXTRACT.

Label False: a Solution of Artificial Vanillin.

NUMBER OF SAMPLE.	Name of Manufacturer, Wholesaler or Producer.
q 16807,	Bell Bros. Specialty Company, Boston.
q 16809,	Bell Bros. Specialty Company, Boston.
q 16810,	Bell Bros. Specialty Company, Boston.

COLD STORAGE OF FOOD.

Articles in Cold Storage condemned upon Physical Examination as Unfit for Food.

Date.	ARTICLES.	Weight (Pounds).	Reasons.	Disposition.
Oct. 8, 1915	Clams,	324	Decomposed,	Rendered.
Oct. 9, 1915	Swordfish,	182	Decomposed,	Rendered.
Oct. 13, 1915	Lamb fries,	20	Decomposed and moldy,	Buried.
Oct. 13, 1915	Pigs' hearts,	34	Decomposed,	Buried.
Oct. 14, 1915	Lambs,	91	Dried out,	Incinerated.
Oct. 21, 1915	Squid,	415	Soiled and dried out,	Rendered.
Total,		1,066		

Articles placed in Cold Storage during the Months of July, August and September, 1915.

ARTICLES.	Cases.	Dozens.	Packages.	Pounds.
Eggs, case,	100,057⅚	3,001,735	–	–
Eggs, broken,	–	–	1,713	581,764
Butter,	–	–	318,069	19,805,829
Poultry,	–	–	2,081	1,719,195¼
Game,	–	–	207	2,768
Meat, fresh,	–	–	6,075	6,189,935¾
Meat products, fresh (except in process of manufacture),	–	–	1,256	195,196
Fish, fresh food,	–	–	19,587	9,424,402
Total,	100,057⅚	3,001,735	348,988	37,919,090

Butter and Eggs held in Cold Storage Oct. 1, 1915.

Eggs, case,	651,873	19,556,190	–	–
Eggs, broken,	–	–	2,702	112,163
Butter,	–	–	465,592	27,544,187
Total,	651,873	19,556,190	468,294	27,656,350

SLAUGHTERING.

During the month of October, 1915, the following confiscations were made: —

Date.	ARTICLES.	Weight (Pounds).	Reasons.	Disposition.
Oct. 13, 1915	Veal, . .	35	Immature, . . .	Slashed.
Oct. 19, 1915	Beef, . .	251	Putrefaction, . . .	Buried.
Oct. 19, 1915	Beef, . .	820	Tuberculosis, . . .	Buried.
Oct. 19, 1915	Beef, . .	375	Decomposed, . . .	Buried.
Oct. 22, 1915	Veal, . .	90¾	Immature, . . .	Fed to hogs.
Oct. 27, 1915	Veal, . .	37¾	Immature, . . .	Fed to hens.
Oct. 29, 1915	Veal, . .	29	Immature, . . .	Fed to hogs.
Total,	. . . . .	1,638½		

Report on Inspection of Slaughtering.

The following is a summary of the reports on inspection of slaughtering in the various cities and towns in the State during the months of July, August and September, 1915: —

Total number of carcasses inspected, ...			28,139
Cattle, ...		4,983	
Calves, ...		16,120	
Hogs, ...		4,040	
Sheep, ...		2,996	
Total number of carcasses passed, ...			27,842
Total number of carcasses condemned, ...			297
Cattle, ...		106	
Calves, ...		175	
Hogs, ...		16	
Reasons for condemnation: —			
(*a*) Tuberculosis, ...		104	
Cattle, ...	92		
Calf, ...	1		
Hogs, ...	11		
(*b*) Immature, ...		144	
Calves, ...	144		
(*c*) Hog cholera, ...		3	
Hogs, ...	3		
(*d*) Septicæmia, ...		1	
Cow, ...	1		
(*e*) Pneumonia, ...		2	
Cattle, ...	2		
(*f*) Paralysis, ...		2	
Cattle, ...	2		
(*g*) Tumor, ...		1	
Cow, ...	1		

Reasons for condemnation — *Concluded.*			
(*h*) Cancer,		1	
Cow,	1		
(*i*) Icterus,		1	
Hog,	1		
(*j*) Dropsy,		1	
Cow,	1		
(*k*) Dysentery,		3	
Calves,	3		
(*l*) Stillborn,		1	
Calf,	1		
(*m*) Retained afterbirth,		1	
Cow,	1		
(*n*) Retained fœtus,		1	
Hog,	1		
(*o*) Milk fever,		1	
Cow,	1		
(*p*) Emaciation,		22	
Cow,	1		
Calves,	21		
(*q*) Exhaustion,		1	
Cow,	1		
(*r*) Bruised,		1	
Cow,	1		
(*s*) Injured,		1	
Cow,	1		
(*t*) Dead on arrival,		4	
Calves,	4		
(*u*) Illegally slaughtered,		1	
Calf,	1		
Total number of reasons for condemnation,			21
Disposition of condemned carcasses: —			
(*a*) Rendered,		242	
Cattle,	89		
Calves,	139		
Hogs,	14		
(*b*) Buried,		48	
Cattle,	17		
Calves,	30		
Hog,	1		
(*c*) Burned,		1	
Hog,	1		
(*d*) Fed to poultry,		5	
Calves,	5		
(*e*) Fed to hogs,		1	
Calf,	1		
Total number of dispositions of carcasses,			5

No reports were rendered by the following cities and towns, or else the report was made by a person who was not a duly appointed and approved inspector or a member of the board of health: —

Alford.
Amherst.
Arlington.
Blackstone.
Boxborough.
Buckland.
Gardner.
Gay Head.
Gosnold.
Groton.
Harvard.
Haverhill.
Holyoke.
Lincoln.
Mount Washington.
Nahant.
Nantucket.
North Reading.
Oak Bluffs.
Paxton.
Quincy.
Rockland.
Ware.
Wenham.
West Springfield.
Winchester.

The following cities and towns rendered "nothing to report:" —

Bedford.
Belmont.
Beverly.
Brookline.
Burlington.
Canton.
Chelsea.
Dover.
Essex.
Everett.
Fall River.
Foxborough.
Groveland.
Halifax.
Hamilton.
Hanson.
Hingham.
Holbrook.
Hopedale.
Hull.
Lancaster.
Littleton.
Malden.
Manchester.
Marion.
Medford.
Middlefield.
Milton.
Natick.
Needham.
Newton.
Plympton.
Revere.
Salem.
Salisbury.
Sharon.
Southborough.
Stoneham.
Stow.
Sudbury.
Swampscott.
Tisbury.
Watertown.
Wellesley.
Wellfleet.
Winthrop.
Yarmouth.

Reports were received from the towns of Southwick and Winchendon too late to classify.

MASSACHUSETTS STATE DEPARTMENT OF HEALTH.

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Division of Sanitary Engineering, . . .	Director and Chief Engineer, X. H. Goodnough, C.E.
Division of Communicable Diseases, . . .	Director, E. R. Kelley, M.D.
Division of Water and Sewage Laboratories, .	Director and Chemist, H. W. Clark.
Division of Antitoxin and Vaccine Laboratories,	Director and Pathologist, Milton J. Rosenau, M.D.
Division of Food and Drugs, ...	Director and Analyst, Hermann C. Lythgoe.
Division of Hygiene, ...	Director, Selskar M. Gunn.

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PUBLIC HEALTH BULLETIN

ISSUED MONTHLY

BY THE

STATE DEPARTMENT OF HEALTH
OF MASSACHUSETTS

DECEMBER, 1915

Vol. 2, No. 11

ALLAN J. McLAUGHLIN, M.D., *Commissioner*

The Common Health of the Commonwealth

Entered as Second-class Matter Oct. 26, 1914, at the Post Office at Boston, Mass.,
under the Act of Aug. 24, 1912

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Approved by The State Board of Publication.

THE DUTIES OF A HEALTH DEPARTMENT.[1]

William G. Kirschbaum, *Agent, Board of Health, New Bedford.*

TO conserve the public health is the duty of every health department in the land. No matter how many physicians there may be in a community, there must be some one, or some department, vested with legal authority to act in matters pertaining to the health of the masses. The wisdom of placing such authority in the hands of competent persons is shown every day. One frequently reads of some serious epidemic in congested communities, and were it not for legal authority vested in health boards, the ravages from disease would be much greater. It is the duty of the physician to diagnose diseases, and if they be of a communicable nature, the law imposes upon him the duty of reporting such to the health authorities, who, by virtue of their office, make regulations governing the isolation of such persons, who, if allowed to roam about at will, would become a menace to the health of the public.

To conserve the health of the public is the most essential feature of health work to-day. True, there are other matters connected with the work which are obligatory, but the looking up of nuisances, the regulating of stables and kindred affairs are minor factors in the great problem of the present time. It has been said that sanitary instruction is even more important than sanitary legislation, and this is certainly true in communities where the population is as cosmopolitan as it is in New Bedford. Education is a big factor in obtaining results, and yet instruction must be measured with a certain regard to legal requirements.

The modern health department in the performance of its duty should seek to educate rather than temporize with attempts to cure ill health. Prevention is the watchword, and that old adage, "an ounce of prevention is worth a pound of cure," is the slogan of every wide-awake health officer. True, there are legal obligations imposed upon boards of health which must be met, and epidemics of disease must be combated, but the meat in the cocoanut is prevention. It is much easier to prevent disease than to cure. All that is needed is a sympathetic community and the co-operation of physicians. Give the wide-awake health department this assistance, and any community can reduce its death rate. It will take time in such communities as New Bedford, Fall River, Lowell and Lawrence, but the trick can surely be turned. It is only a matter of educating the masses, a process, I admit, that is slow, but a persistent effort is sure to win out. The health officer looks for big things from the coming generation. The younger element is being educated along the lines which are sure to bear fruit.

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[1] Delivered at a public meeting held under the auspices of the Brotherhood of the Howard Methodist Episcopal Church, New Bedford.

If the medical profession and the public co-operate with a health department, any form of communicable disease can be kept at a low point. A great deal depends upon an early diagnosis and prompt reporting to the authorities in such cases. Efforts put forth at the beginning of a conflagration are far more effective than when the flames are under headway. If cases are concealed, or if laws for the control of communicable diseases are disregarded, the public health cannot be conserved, and any citizen or medical man guilty of such an offence is an enemy of the community in which he lives.

Much has been done in the last decade by health departments throughout the United States, and there still remains much more to do. There can be no let up. The present campaign against tuberculosis has greatly reduced the mortality from this disease. The control of our milk supplies by rigid regulations has reduced typhoid fever, and yet when you consider the deaths from this disease alone, the figures are appalling. Typhoid fever has been called the great American curse for the simple reason that people in this country have not paid attention to the warnings sent out. In no other country is the mortality from this disease so large. Do you realize that the deaths from this malady alone rank fourth? Why, do you ask, is this? Because the people on the continent of Europe have been educated to avoid contracting this terrible disease, and we are just waking up to the reality of the situation. When the water and milk supplies cannot be controlled the antityphoid prophylactic has worked wonders in the old country. Why not here?

Diphtheria antitoxin, when administered early, has deprived that disease of its dread. Education of the mothers on the care and feeding of their babies has wonderfully reduced our infant mortality. Education is the keynote to success in these results. The wide-awake health department of the present day is an educator in health matters, literature of all kinds, printed in different languages, being mailed to householders in an effort to prevent disease rather than treat it. It is the function of the physician to treat the sick one, and the duty of health officials to prevent if possible. It has been said that printer's ink has saved more lives than physicians, and the thinking men of our country are alive to the importance of educating the masses in sanitation and hygiene.

Every good citizen awake to his best interest should take a keen interest in the health status of the community. There is nothing more intimately affecting individual and family welfare than the maintenance of healthful surroundings. The health of a community is the combined health of those living in it. It should be of interest to every individual, for upon it depends the welfare of himself, of his family and of his fellow citizens. Each case of a communicable disease in a city threatens the welfare of every citizen. Modern civilization in its development has become more complex, and as a result of the many avenues of social and commercial intercourse we are brought more frequently into contact with our fellow man and his life. Where the bread is baked in the home, people are not exposed to the diseases of the bakers and of those who handle the bread in shops; but in cities most bread is not baked in the home, hence the measures taken to safeguard this food supply. Cleanliness means much to a community. The essentials in a city the size of New Bedford might be summed up with the following assets: clean streets, alleys and back yards; good water supply and drainage; school inspection; meat and food inspection, and last but not least, segregation of contagious diseases; and it is because of this that the law requires every city in the State to maintain a contagious disease hospital. Isolation is essential; it can be done best in hospitals constructed for that purpose.

When proper sanitary methods are enforced there is no outbreak of diseases which cannot be successfully controlled. All we need is prompt action. Much has already been done by sanitation, but it is only a beginning, and the great victory over preventable diseases is to be won through the aid of an educated and enlightened public. Mosquitoes with their sting implant the germ of malaria; and flies often carry on their feet the germ of tuberculosis, typhoid fever and diphtheria. It is well that the masses should know these things, that health officials may secure aid from every possible source. Swamps breed the mosquito, and health authorities are alive to the fact that the breeding season is the proper time to destroy these pests.

The best asset of a community is health, and in these days of preventive medicine the people living in congested districts make no mistake in following out instructions given by health officials. The man who sneers at modern methods in the science of medicine and the control of large communities is a back number. We, who live in a cosmopolitan city or a large community, must adapt ourselves to conditions; and where there is congestion there must be care to secure protection. How often we hear of a man or woman disputing the diagnosis of a reputable physician, particularly if it be a contagious disease. The placarding of a house for a contagious disease greatly disturbs some people who believe that they are immune from any such infection, and who oftentimes resent the action of a health board. The officials of a health department do not placard houses for fun. It is done to protect others, and when contagion comes home to us, help rather than retard the health officer. The laws of this Commonwealth compel him to place a warning sign on houses where dangerous diseases exist.

You are all familiar with the restrictions placed on cases of scarlet fever and diphtheria, but perhaps you may not know just how such cases are released. In cases of scarlet fever patients are released when desquamation ceases, provided there are no discharges from the nostrils and ears. Diphtheria cases are released upon negative cultures taken from the throat and nostrils of a patient. If two successive negative cultures are found at the expiration of two weeks' illness release is secured; otherwise, a single negative culture at the expiration of four weeks. Right here let me say, be suspicious of the mild case of diphtheria and scarlet fever, — the one that the parents say never was ill; that sort of case will do more damage in a community than fifty cases confined to the house. Children suffering with these diseases, no matter how well they may appear physically, should not be allowed to mingle with others; yet there are some unprincipled persons in every community who allow their youngsters to do as they please until reprimanded by a health official. It is almost impossible to watch every case, and there should be community pride enough in all of us to assist in checking the spread of any communicable disease.

Personal hygiene plays a prominent part in the prevention of disease, and simple as it may seem, there is a lot of good sound sense in the suggestion that frequent washing of the hands is a means of prevention. Remember that the three F's — fingers, flies and filth — cause many of the preventable diseases, and you will readily appreciate the wisdom of personal hygiene in this respect. Here are a few suggestions along this line: —

Be suspicious of the person with a cold. Scarlet fever, diphtheria and measles begin with a cold.

Keep away from a house where you know there is a case of scarlet fever, diphtheria, measles or whooping cough.

Do not neglect a sore throat. It may mean serious illness. Call in a physician.

Do not spit if you can help it. Never spit on the floor or sidewalk.

Do not put the fingers into the mouth.

Do not wet the finger in the mouth when turning the leaves of books.

Do not put pencils, money or pins into the mouth. Food and drink are the only articles that should be put in the mouth.

Never cough or sneeze in a person's face. Cover the mouth and turn your face to one side when coughing.

Keep your face and hands clean. Wash the hands with soap and water before each meal.

We hear a great deal these days of the wear and tear diseases among men, some of whom begin to go backward at the age of forty years. The man who is active in business, seldom if ever taking a rest from his labors, is bound to pay the penalty. Why not, as a preventive measure, occasionally consult some competent physician; let him give you a thorough physical examination, and, if approaching trouble be found, govern yourself accordingly. Is n't this prevention in the true sense of the word? Many have adopted this course. Why not you? As I have already said, it is easier to prevent than to cure disease, and this proves true in every form of malady, whether it be contagious diseases or not. The examination of the heart and urine occasionally may mean longevity, and if you happen to be a policyholder in a life insurance company I'm not so sure but the company would make it worth your while to adopt these measures of prevention.

The activities of a board of health are many. To enumerate all that is required of a live department would be wearisome. Just to give you some idea of what the New Bedford department has accomplished thus far this year along the line of educational work, let me give you a few figures. We have mailed to the mothers of the newly born 3,009 circulars, giving instructions how to care for their babies, in addition to the regular visits of the department nurses. This feature of the work has been in vogue for the last seven years, and we are beginning to get results. In 1909, with an estimated population under 100,000, we had 543 deaths of children under one year of age as against 534 last year, while thus far this year there have been but 464 deaths, and the population to-day is 109,562. Every manufacturing city has a large infant mortality, and everything that can possibly be done is employed to awaken a keen interest in this matter. "Give the babies a chance" is the motto of every health department in all of the larger cities, and a valuable factor in this work is the assistance rendered by the leading charitable organizations in a community.

Another activity is that of looking after infants' eyes within fourteen days after birth. The law is very strict in this particular, and the local authorities, appreciating the wisdom of skillful supervision by employing specialists and trained nurses, forced the Legislature to enact a law making it compulsory now to employ only specialists and a trained nurse in the treatment of such cases. Thus far this year the oculist of the local board has made 1,734 visits. The saving of the sight of infants thus afflicted means a big saving to the Commonwealth.

Housing conditions is another factor in this work, a very essential phase, for the reason that a great deal depends upon the home in preventing the spread of disease. Especially is this true with tuberculosis. Housing regulations are bound to occupy the attention of all city health departments, and in many of the larger towns it is just as necessary.

Still another activity is that of providing proper sewage disposal. New Bedford has been alive to this feature for a number of years. For ten years or more the local board of health has made war on the privy vault, reducing the number each year, until at this time I believe there are not more than 250 in the whole city, and they are tolerated because they have to be. Right here let me say that there is not a tenement house in the city — I mean the houses which are occupied by the great mass of workers in the extreme ends of the city — but has water-closets instead of privy vaults in the yard, and every tenement house has a supply of city water under its roof. But few large cities can say as much. Our greatest trouble here is in overcrowding, and an attempt is to be made this winter to better that condition.

Another innovation this year was the distribution, at the beginning of the new school year, of printed circulars to every scholar, which were delivered to parents, giving advice in an effort to prevent the spread of contagious diseases among school children. It is too early to conclude with what result, but it is fair to assume that good will be accomplished. During this year the department has published twenty-five bulletins giving advice along the lines calculated to aid the masses in securing for themselves healthful conditions, besides making use of health suggestions displayed at different moving-picture theatres.

One of the greatest activities ever undertaken by health departments is that of attempting to eradicate the great white plague; and let me say right here that Massachusetts is in the front rank in this noble work. The Empire State is doing a grand work along this line by treating cases of pulmonary tuberculosis in county hospitals, while in this Commonwealth there are five large institutions, with a capacity of 1,654 beds, maintained by the State, and numerous local hospitals throughout the Commonwealth. In all there are in this State 3,191 beds for persons suffering with this disease. People realize that something must be done to wipe out tuberculosis, and to any one who has given the subject attention it is apparent that it is easier to prevent than it is to cure it. Treatment is a long siege, not only taking time but money, and it is right here where Massachusetts has gone on record as a leader in the movement by taking from its treasury a certain amount for each patient treated at its own institutions, or those treated in hospitals which are subsidized under the law. It is needless for me to rehearse the work accomplished here along this line, for you all are aware of the efforts put forth by the local health department and the New Bedford Anti-Tuberculosis Society. It is sufficient to say that we have one of the best institutions of its kind in the New England States, and we as citizens of New Bedford should feel proud of the reputation which we have gained in our effort to combat this dreadful disease, which, according to the best authorities versed in statistics, is the cause of more deaths every year than any war ever waged, exception being made, perhaps, to the casualties in the present European war. It is claimed that this disease alone kills 200,000 persons each year in the United States. It kills one-third of all who die between the ages of eighteen and forty-five. Is it any wonder that the different States in the Union are keenly alive to the situation? Here in New Bedford the treatment of patients suffering with pulmonary tuberculosis has been one of the principal activities of the health department for the last seven years, and large sums of money are expended yearly in this battle with the disease. This year alone there have been treated at the expense of the city's funds no less than 278 patients, at a cost of about $38,000. And what has been the result, you ask? Let me tell you; we have a record for 1915 of 29 arrested cases and 57 with improved conditions. A pretty good showing when you consider the difficulties that are encountered in the treatment of persons suffering with this malady. Of the 278 persons treated for tuberculosis, the New Bedford Sanatorium cared for the greater number, while St. Luke's and the Derby Hospital looked after 18 suffering with forms of the disease other than of the pulmonary type. During the last two years the local department has been fairly successful in treating cases at the homes of patients, and right here is where education has worked wonders. Every patient has been taught how best to care for himself, and where this advice has been followed in the homes where success looked favorable, the result has been gratifying. Institutional treatment is of course to be preferred, but there are those who cannot be prevailed upon to enter a sanatorium, and the laws do not make it obligatory. There is a lot of sympathy for the sufferers with this disease, and in nearly every community a helping hand is given to the unfortunate. The outlay of any sum of money in this most worthy object should have the sanction of every man and woman in a community.

To sum up, health work to-day is a profession in itself, but the individual, or individuals for that matter, can accomplish but little without the co-operation of a sympathetic community, and the best way to reach the people in order to bring about this end is education and a liberal use of printer's ink.

HEALTH WEEK IN QUINCY.

Merrill E. Champion, *District Health Officer, Eastern District.*

THE city of Quincy, through its board of health, feeling the need of a better acquaintance on the part of its citizens with the aims and activities of the local board of health, has celebrated a "health week." This began November 8 and lasted until November 14. Preparation for this event began several weeks before this date by the formation of a committee made up of various persons representing different charitable and philanthropic organizations of the city. This committee, under the chairmanship of one of the Quincy physicians, held a number of meetings at which plans were canvassed for a program which would afford an all-round presentation of the various phases of preventive health work. The executive secretary of the committee was the general secretary of the Associated Charities of Quincy. The aid of the ministers of the city was enlisted; a very general announcement was made in the churches the Sunday preceding health week; the superintendent of schools undertook to see that programs of the coming events were placed in the hands of every school child, to be taken home to the parents. Representatives of two of the largest industries of Quincy saw to it that their men were notified, and urged attendance on the various meetings. The assistance of those in charge of Adams Academy was obtained, with the result that this was used as the chief meeting place during the week.

Many associations and organizations, engaged either in preventive medical work or in the betterment of living conditions, lent their assistance and furnished their exhibits for display during health week. The State Department of Health gave all possible encouragement to the idea, loaning its exhibits and furnishing a number of moving-picture films and stereopticon slides; the State district health officer of the eastern health district served as chairman of the program committee. The exercises of the week were opened by the mayor of Quincy, who expressed his hearty sympathy with anything which would tend to improve the health conditions of the city. The chairman of the local board of health gave a simple, convincing talk, explaining to his auditors many of the details of the working of his department, and illustrating vividly many of the difficulties which confront it.

One whole day was devoted to the tuberculosis question, with talks in the afternoon by the physician and nurse in charge of the local tuberculosis dispensary, and in the evening by Mr. Seymour Stone of the Boston Society for the Relief and Control of Tuberculosis. Another day was devoted to industrial hygiene, with talks by the district health officer for the northeastern health district, and by representatives of two of Quincy's largest industries. Still another day was devoted to school inspection work and child welfare. On this day a talk was given in the afternoon, by the school nurse of Quincy, on school inspection, and in the evening on child welfare by the chief of the division of hygiene of the State Department of Health. A fifth day was devoted to the work of the Quincy Associated Charities and of the Quincy Nursing Association. Talks were given by the general secretary of the former and a demonstration of phases of the work of district nursing by the district nurses themselves. That evening there was an illustrated talk on dental hygiene by a representative of the Quincy dentists. The last week day of the celebration was taken up by a playlet dealing with the tenement-house question, followed by a stereopticon talk, and in the evening the work of the Life Extension Institute was ably presented by Dr. Mark W. Richardson.

The work of the whole week was brought to a focus Sunday afternoon by the exhibition of moving-picture films, dealing with many phases of preventive health work, furnished by the Massachusetts State Department of Health, and a film showing the activities of the pupils of the Perkins Institute for the Blind. These films were exhibited twice in the afternoon, and were seen by fully 2,000 people.

The fundamental aim of any such health week is to educate the people of the city or town to an appreciation of the possibilities which are theirs along the line of conservation of life and health. It should bring them into closer touch with the aims and activities of their own board of health. It shows what may be gained by the wise expenditure of public money. It likewise shows, only too often, the pitiful amount spent by most of our cities and towns in the guarding of their greatest asset — PUBLIC HEALTH.

LOOK IN THE THROAT.

THE following statement and letter, issued by Dr. Joseph F. O'Shea of Lynn, brings out a very important point, especially in connection with the control of diphtheria, which is applicable in many parts of the Commonwealth. The material is reprinted from the Lynn "Item" of November 18.

To impress upon parents the ease with which serious throat and lung troubles may be prevented, City Physician Joseph F. O'Shea to-day issued a letter of instruction and warning. During the past month there have been three fatal cases of diphtheria, which might easily have been saved, according to Dr. O'Shea, had the throats been cared for early. Dr. O'Shea writes: —

"It may be truthfully said that the safety of a community depends on the general good health of its inhabitants, and in no way is this threatened more seriously than by the presence of contagious diseases.

"The word 'contagious' means that the disease may be conveyed from a sick to a well person or persons, with the result that from an individual case, unless proper precautions are taken, a general epidemic may result. Proper precautions cannot be taken, curative remedies cannot be administered, and contagion cannot be prevented unless early recognition of the disease is made and reported to the health authorities, upon whom rests the responsibility of the general health of the community. Of the many varieties of contagious disease which affect our community none is more dreaded because of their virulent contagion, their frequent appearance and their fatal results than diphtheria and scarlet fever.

"A letter recently received from Dr. Stone, a physician of great experience in this line of work, and now the attending doctor at the Lynn Hospital for Contagious Diseases, is herewith appended. It may be said to be written from the battlefield itself, where we wage continual war with diphtheria and scarlet fever, and the picture he draws is not overcolored."

LYNN, MASS., Nov. 15, 1915.

DR. JOSEPH F. O'SHEA.

DEAR SIR: — I wish to call to your attention the large number of hopeless cases of diphtheria which we are receiving at the contagious hospital at the present time.

As usual the months of October, November and December bring to the hospital more septic cases than are brought during other seasons. This is no doubt largely due to the change from an out-of-door to an indoor life, where, crowded together in both tenement and schoolhouse, they fall victims to the dread disease. Later, as they become accustomed to their new surroundings and the weather gets colder, there is somewhat of a falling off in both the number and severity of cases.

It seems to be the general belief that diphtheria falls from a clear sky, and that, as in pneumonia, the victims are overwhelmed at once. I hope that I may be able to co-operate with you, to the end that we may succeed in teaching parents and others in charge of children that diphtheria, other than laryngeal or membranous croup, is not violent in its onset, but, to the contrary, is extremely insidious and easily overlooked until the damage is so great that there can be no repair; and children that appear to be only slightly indisposed and look pale may even then be well advanced in the disease; and that diphtheria is often mistaken for a bad cold.

In membranous croup or laryngeal diphtheria mothers are often mistaken in believing it to be a bad bronchitis or ordinary croup, and no hurry is made to call their doctor until asphyxiation is imminent, and the child may die before aid can be rendered.

If we can impress upon mothers the value of early examination of the child's throat in any case of sickness where no physician has been called, many lives may be saved that otherwise will perish.

Our records show that children and adults who receive antitoxin within twenty-four hours from the first appearance of the membrane almost invariably recover, while in the cases which receive antitoxin later than twenty-four hours the mortality is in almost exact proportion to the day of disease the antitoxin is first administered.

I believe we should have a slogan, "Look in the throat," in every case of sickness, and do it often. When mothers discover white patches or a foul-smelling discharge from the nose of a croupy, barking child, if they can be taught to call their doctor at once our mortality in diphtheria will drop to a point near zero.

Is there not some way to get this before the people living in tenement houses where the people speak languages other than English?

I believe that diphtheria could and should be exterminated. Early diagnosis immediately followed with antitoxin would soon stamp out the disease in this State if the proper knowledge could be brought home to the entire public. With a campaign waged by physicians, nurses and school teachers I believe much could be accomplished.

I believe, as you have suggested, illustrated lectures showing the diseased throats and any other phases of the disease would be of great value to educate the public to the value of the early education and treatment of diphtheria.

Yours truly,
CHARLES E. STONE, M.D.

"A particularly happy and useful thought has been expressed by the doctor in his suggested slogan, 'Look in the throat.' It is a medical 'safety first,' and as such should be generally taken up. The local health authorities are already taking steps to give illustrated views and lectures on the cause, recognition and remedial care of diphtheria and scarlet fever."

RÉSUMÉ OF COMMUNICABLE DISEASES FOR NOVEMBER, 1915.

Prevalence. — The number of cases of communicable diseases reported to this Department during the month of November varied slightly from the number reported during October. The total number of cases this month was 4,574; last month, 4,547. The following diseases have decreased in number: anterior poliomyelitis, cerebrospinal meningitis, diphtheria and typhoid fever. There was an increase in the number of cases of chicken pox, measles, scarlet fever and whooping cough.

The amount of tuberculosis reported is of interest. During November, 1914, 510 cases of all forms of this disease were notified, while in

November, 1915, 601 cases were notified. This increase in cases, in all probability, is due to better reporting as a result of the operation of the tuberculosis dispensaries.

In comparison with the same month last year the total number of cases was larger. This increase was due largely to the variation in the number of cases of measles and the marked increase in the number of cases of whooping cough.

Mortality. — Aside from tuberculosis (which always causes the greatest number of deaths), the important causes of death were diphtheria, typhoid, whooping cough. Of these diseases diphtheria with its 65 deaths is of vital interest. Notwithstanding the fact that we know the cause, modes of transmission, and have an efficient cure, the great toll of deaths continues from this disease. The other two diseases of prime importance are whooping cough and typhoid fever. An analysis of the returns shows that whooping cough caused 23 deaths during November. When we reflect that there is almost three times as much whooping cough in this State this year as there was last, it requires little calculation to anticipate a large number of unnecessary deaths this year. While there were only 5 deaths during the month from measles this does not tell the whole story. The after-effects of this disease are very much more harmful than the disease itself. This applies also to scarlet fever.

Distribution. — While the total number of cases of diphtheria decreased, the disease is still prevalent in the following places: Springfield, Worcester, Southbridge, Marlborough, Cambridge, Saugus, Brockton, Billerica, Leominster, Fitchburg, Maynard and Lowell. In some of these places there has been no increase in the number of cases over last month. In fact, in some of them there has been a decrease. This is true of Fitchburg.

In typhoid fever the only important focus has been at Ashburnham. Here there was a sharp epidemic.

Measles shows a marked tendency to increase in the following places: Salem, Chelsea and Taunton, while in Springfield it is holding its own. It is also present in considerable numbers in Holyoke, Lawrence, Saugus, Lynn and Brookline.

Whooping cough seems to be scattered over the whole State. The most important points of prevalence are Springfield, Newton, Lawrence, Winthrop, Framingham, Northampton and Provincetown. In the last-named place the disease has been present for a number of months, and shows a tendency to increase.

Scarlet fever was present in more than the usual amount in Lynn, Brookline, Leominster, Fitchburg and North Attleborough.

Epidemics. — During the month of November the only epidemic of importance occurred at Ashburnham. Twenty-one cases of typhoid fever were reported between November 7 and November 23. A careful investigation is being conducted by both the State district health officer and the engineering division. This outbreak presents some puzzling features, and at the present writing the source of infection has not been determined. A detailed report of this epidemic will be published later.

Rare Diseases. — During the month of November, 3 cases of anthrax were reported; 2 of these were in Woburn and 1 in the city of Boston. Somerville reported 1 death during the month from actinomycosis.

RETURNS OF DISEASES.

CASES OF DISEASES DECLARED BY THE STATE DEPARTMENT OF HEALTH TO BE DANGEROUS TO THE PUBLIC HEALTH.

[Under the provisions of section 52 of chapter 75 of the Revised Laws.]

DISEASE.	WEEK ENDING —				
	Nov. 6.	Nov. 13.	Nov. 20.	Nov. 27.	Total.
Anterior poliomyelitis,	3	7	1	1	12
Anthrax,	2	–	–	1	3
Cerebro-spinal meningitis,	1	2	1	2	6
Chicken pox,	89	110	124	113	436
Diphtheria,	271	296	269	262	1,098
Dog bite (requiring antirabic treatment),	–	1	3	1	5
Dysentery,	–	–	–	1	1
German measles,	4	3	3	2	12
Infectious diseases of the eye: —					
(*a*) Ophthalmia neonatorum,	27	35	28	37	127
(*b*) Suppurative conjunctivitis,	1	2	2	16	21
(*c*) Trachoma,	1	2	1	1	5
Malaria,	3	2	–	–	5
Measles,	117	135	195	217	664
Mumps,	11	10	24	20	65
Pellagra,	4	–	–	1	5
Rabies,	–	1	–	–	1
Scarlet fever,	110	128	175	168	581
Septic sore throat,	1	1	3	1	6
Tetanus,	–	–	1	–	1
Tuberculosis, pulmonary (or not classified),	133	120	147	145	545
Tuberculosis, other forms,	11	17	18	10	56
Typhoid fever,	52	93	52	46	243
Whooping cough,	146	221	176	135	678

RETURNS OF DEATHS.

Deaths from Diseases declared by the State Department of Health to be Dangerous to the Public Health.

[Under the provisions of chapter 210, Acts of 1913.]

DISEASE.	Week ending —				
	Nov. 6.	Nov. 13.	Nov. 20.	Nov. 27.	Total.
Actinomycosis,	–	1	–	–	1
Anterior poliomyelitis,	3	–	–	–	3
Cerebro-spinal meningitis,	1	2	1	2	6
Diphtheria,	16	16	23	10	65
Measles,	1	1	1	2	5
Ophthalmia neonatorum,	1	–	1	–	2
Pellagra,	1	1	2	–	4
Scarlet fever,	1	2	2	1	6
Tetanus,	–	–	–	1	1
Tuberculosis, pulmonary (or not classified),	50	46	54	58	208
Tuberculosis, other forms,	4	17	11	10	42
Typhoid fever,	6	5	6	4	21
Whooping cough,	9	3	6	5	23

SPECIAL NOTICES.

A circular letter issued by the Commissioner of Health to the local boards of health on Dec. 28, 1915, does not change the list of reportable diseases as defined by sections 49, 50 and 52 of chapter 75 of the Revised Laws; it merely defines the diseases to which chapter 213 of the Acts of 1902, as amended by chapter 386 of the Acts of 1907 and chapter 380 of the Acts of 1909, is to be applied.

This Department is recommending to the General Court the repeal of section 12 of chapter 75 of the Revised Laws, which requires the boards of health in towns of more than 5,000 population to report deaths annually to the State Department of Health. Pending the action of the General Court, the old forms for this report are not being mailed to the boards of health.

WEEKLY RETURNS OF DEATHS FROM DISEASES DECLARED BY THE STATE DEPARTMENT OF HEALTH TO BE DANGEROUS TO THE PUBLIC HEALTH IN CITIES AND TOWNS IN MASSACHUSETTS.

[Under the provisions of chapter 210, Acts of 1913.]

In all cases where the name of a community is not mentioned it signifies that no deaths from these diseases have been reported to this office for the period covered by the table.

Week ending Nov. 6, 1915.

CITIES AND TOWNS.	Population. Census for 1910.	Diphtheria.	Measles.	Scarlet Fever.	Tuberculosis, Pulmonary (or not classified).	Tuberculosis, Other Forms.	Typhoid Fever.	Whooping Cough.
Boston,	686,092	4[1]	1	–	16	–	1	4
Worcester,	145,986	–	–	–	4	–	–	1
Fall River,	119,295	2	–	–	3	–	–	2
Lowell,	106,294	1	–	–	1	–	–	1
Cambridge,	104,839	1	–	–	6	–	–	–
New Bedford,	96,652	1	–	–	1	1	1	–
Lynn,	89,336	–	–	–	–	1	–	–
Springfield,	88,926	–	–	–	1	–	–	–
Lawrence,	85,892	1	–	–	2	2	1	1
Somerville,	77,236	1	–	–	–	–	–	–
Holyoke,	57,730	–	–	1	1	–	–	–
Brockton,	56,878	–	–	–	1	–	1	–
Malden,	44,404	2	–	–	–	–	–	–
Haverhill,	44,115	–	–	–	1	–	–	–
Salem,	43,697	–	–	–	1	–	–	–
Fitchburg,	37,826	1	–	–	1	–	–	–
Taunton,	34,259	–	–	–	1	–	–	–
Everett,	33,484	1	–	–	–	–	–	–
Chelsea,	32,452	–	–	–	1	–	–	–
Brookline,	27,792	–	–	–	1	–	–	–
Chicopee,	25,401	–	–	–	1	–	–	–
Northampton,	19,431	–	–	–	1	–	–	–
Westfield,	16,044	–	–	–	1[1]	–	–	–
Peabody,	15,721	–	–	–	1	–	–	–
Woburn,	15,308	–	–	–	–	–	1	–
Watertown,	12,875	–	–	–	1	–	–	–
West Springfield,	9,224	–	–	–	–	–	1	–
Braintree,	8,066	–	–	–	2	–	–	–
Mendon,	880	1	–	–	–	–	–	–
Boylston,	714	–	–	–	1	–	–	–
Totals,	–	16	1	1	50	4	6	9

In addition to the above, 1 death from cerebro-spinal meningitis (nonresident) occurred in Boston; also 1 death from anterior poliomyelitis in Boston, 1 in Chicopee and 1 in Lowell; also 1 death from ophthalmia neonatorum in Lowell; and 1 death from pellagra in Fall River.

[1] One nonresident.

Week ending Nov. 13, 1915.

CITIES AND TOWNS.	Population. Census for 1910.	Diphtheria.	Measles.	Scarlet Fever.	Tuberculosis, Pulmonary (or not classified).	Tuberculosis, Other Forms.	Typhoid Fever.	Whooping Cough.
Boston, ...	686,092	6[1]	1	1[2]	11[2]	5	2	3
Worcester, ...	145,986	1	–	–	–	1	–	–
Lowell, ...	106,294	–	–	–	1	2	–	–
Cambridge, ...	104,839	1	–	–	4	–	–	–
New Bedford, . . .	96,652	–	–	–	1	1	–	–
Lynn, ...	89,336	1	–	–	1	1	–	–
Springfield, ...	88,926	–	–	–	1	1	1	–
Lawrence, ...	85,892	–	–	1	1	1	–	–
Somerville, ...	77,236	2	–	–	2	–	–	–
Holyoke, ...	57,730	1	–	–	2	–	1	–
Brockton, ...	56,878	1	–	–	–	–	–	–
Malden, ...	44,404	–	–	–	1	–	–	–
Haverhill, ...	44,115	–	–	–	1	–	–	–
Salem, ...	43,697	–	–	–	1	–	–	–
Newton, ...	39,806	1	–	–	1	1	–	–
Fitchburg, ...	37,826	–	–	–	2	–	–	–
Everett, ...	33,484	–	–	–	1	–	–	–
Chelsea, ...	32,452	–	–	–	1	–	–	–
Waltham, ...	27,834	–	–	–	1	–	–	–
Brookline, ...	27,792	–	–	–	–	1	–	–
Chicopee, ...	25,401	–	–	–	1	–	–	–
Northampton, ...	19,431	–	–	–	2	–	–	–
Beverly, ...	18,650	–	–	–	1	–	–	–
Westfield, ...	16,044	–	–	–	2[1]	–	–	–
Clinton, ...	13,075	–	–	–	–	1	–	–
Framingham, ...	12,948	–	–	–	1	–	–	–
North Attleborough, . .	9,562	–	–	–	–	1	–	–
Dedham, ...	9,284	–	–	–	2	–	–	–
Saugus, ...	8,047	1	–	–	–	–	–	–
Milton, ...	7,924	–	–	–	1	–	–	–
Whitman, ...	7,292	–	–	–	–	–	1	–
Mansfield, ...	5,183	–	–	–	1	–	–	–
Canton, ...	4,797	–	–	–	1	–	–	–
Foxborough, ...	3,863	–	–	–	1	–	–	–
Manchester, ...	2,673	–	–	–	–	1	–	–
Leyden, ...	363	1	–	–	–	–	–	–
Totals, ...	–	16	1	2	46	17	5	3

In addition to the above, 1 death from cerebro-spinal meningitis occurred in Peabody and 1 in Medford; also 1 death from pellagra in Foxborough, and 1 from actinomycosis in Somerville.

[1] Two nonresidents.

[2] One nonresident.

Week ending Nov. 20, 1915.

CITIES AND TOWNS.	Population. Census for 1910.	Diphtheria.	Measles.	Scarlet Fever.	Tuberculosis, Pulmonary (or not classified).	Tuberculosis, Other Forms.	Typhoid Fever.	Whooping Cough.
Boston,	686,092	4[1]	–	–	16	2	–	3[2]
Worcester,	145,986	–	–	–	4	–	–	–
Fall River,	119,295	3	1	–	1	–	–	1
Lowell,	106,294	3	–	–	2	1	1	–
Cambridge,	104,839	1	–	–	2	–	1	–
New Bedford,	96,652	2	–	–	1	2	–	–
Lynn,	89,336	1	–	–	–	–	–	–
Springfield,	88,926	–	–	–	3	1	2	–
Lawrence,	85,892	2	–	2	2	–	–	–
Somerville,	77,236	1	–	–	1	–	1	–
Brockton,	56,878	–	–	–	1	1	1	–
Malden,	44,404	–	–	–	1	–	–	–
Haverhill,	44,115	–	–	–	1	–	–	–
Fitchburg,	37,826	1	–	–	1	–	–	–
Taunton,	34,259	1	–	–	1	–	–	–
Everett,	33,484	–	–	–	–	1	–	1
Pittsfield,	32,121	–	–	–	1	1	–	–
Chicopee,	25,401	1	–	–	1	–	–	–
Beverly,	18,650	–	–	–	1	–	–	–
Westfield,	16,044	–	–	–	3[3]	–	–	–
Melrose,	15,715	–	–	–	1	–	–	–
Adams,	13,026	–	–	–	2	–	–	–
Winthrop,	10,132	–	–	–	1	–	–	–
North Attleborough,	9,562	–	–	–	–	1	–	–
Saugus,	8,047	1	–	–	1	–	–	–
Bridgewater,	7,688	–	–	–	1	–	–	–
Maynard,	6,390	1	–	–	1	–	–	–
Provincetown,	4,369	–	–	–	1	–	–	1
Westport,	2,928	–	–	–	1	–	–	–
Wilbraham,	2,332	1	–	–	–	–	–	–
Raynham,	1,725	–	–	–	1	–	–	–
Truro,	655	–	–	–	1	–	–	–
New Braintree,	464	–	–	–	–	1	–	–
Totals,	–	23	1	2	54	11	6	6

In addition to the above, 1 death occurred from ophthalmia neonatorum in Boston, 1 from cerebrospinal meningitis in Peabody, and 1 from pellagra in Brockton and 1 in Worcester.

[1] Two nonresidents. [2] One nonresident. [3] Three nonresidents.

Week ending Nov. 27, 1915.

CITIES AND TOWNS.	Population. Census for 1910.	Diphtheria.	Measles.	Scarlet Fever.	Tuberculosis, Pulmonary (or not classified).	Tuberculosis, Other Forms.	Typhoid Fever.	Whooping Cough.
Boston,	686,092	4[1]	–	–	20[2]	3[2]	–	1
Worcester,	145,986	–	–	–	3	–	–	–
Fall River,	119,295	1	–	–	6	–	–	–
Lowell,	106,294	–	–	–	2	–	–	2
Cambridge,	104,839	–	–	–	–	2	1	–
New Bedford,	96,652	–	–	–	4	–	–	–
Lynn,	89,336	1	–	1	–	1	–	–
Springfield,	88,926	1	–	–	1	–	–	–
Lawrence,	85,892	–	–	–	3	1	–	–
Somerville,	77,236	1	–	–	–	–	–	–
Holyoke,	57,730	–	–	–	–	1	–	–
Brockton,	56,878	–	–	–	2	–	1	–
Malden,	44,404	1	–	–	–	–	–	–
Haverhill,	44,115	–	–	–	1	–	–	–
Salem,	43,697	–	–	–	2	–	–	–
Fitchburg,	37,826	1	–	–	3	1	1	–
Taunton,	34,259	–	1	–	1	–	–	–
Everett,	33,484	–	–	–	1	–	–	–
Chelsea,	32,452	–	–	–	–	1	1	–
Waltham,	27,834	–	–	–	1	–	–	–
North Adams,	22,019	–	–	–	1	–	–	–
Beverly,	18,650	–	–	–	1	–	–	–
Westfield,	16,044	–	–	–	1[2]	–	–	1
Bridgewater,	7,688	–	–	–	2	–	–	–
Wellesley,	5,413	–	–	–	–	–	–	1
Mansfield,	5,183	–	–	–	1	–	–	–
Walpole,	4,892	–	1	–	–	–	–	–
Canton,	4,797	–	–	–	1	–	–	–
North Brookfield,	3,075	–	–	–	1	–	–	–
Totals,	–	10	2	1	58	10	4	5

In addition to the above, 1 death occurred from cerebro-spinal meningitis in Boston and 1 in Lowell, and 1 death from tetanus in Pittsfield.

[1] Two nonresidents.

[2] One nonresident.

REPORT UPON THE WORK OF THE BACTERIOLOGICAL LABORATORY FOR THE MONTH OF NOVEMBER, 1915.

The following gives the total number of bacteriological examinations made in the laboratory of the State Department of Health during the month of November, 1915: —

	Number of Examinations.	Diagnosis.		Release.	
		Positive.	Negative.	Positive.	Negative.
Diphtheria,	2,266	160	1,622	99	385

	Number of Examinations.	Positive.	Negative.	*Atypical.
Tuberculosis,	216	43	173	
*Typhoid fever (Widal test),	278	65	205	8
Typhoid fever (culture test),	47	1	46	
*Paratyphoid fever,	3	–	3	–
Malaria,	4	1	3	
Miscellaneous,	99			

Total number of examinations made, 2,913.

The following gives the total number of biological products and diagnostic outfits distributed by the State Department of Health during the month of November, 1915: —

Biological Products.

Diphtheria Antitoxin: —	
12,000 units (special for the Boston City Hospital),	143 bottles.
3,000 units,	4,869 bottles.
1,500 units,	1,709 bottles.
750 units,	1,206 bottles.
Smallpox vaccine,	4,094 tubes.
Typhoid vaccine,	2,282 ampoules.
Antimeningitis serum,	68 bottles.
Silver nitrate solution,	233 droppers.

Diagnostic Outfits.

Culture tubes,	2,837
Sputum bottles,	405
Widal outfits,	348
Bile outfits,	59
Malaria outfits,	12

FOOD AND DRUGS.

The following tables present the results of the laboratory examinations of samples of food and drugs collected during the month of November, 1915: —

The cities and towns in which samples were collected were: Amesbury, Attleboro, Belmont, Boston, Braintree, Bridgewater, Brockton, Brookline, Cambridge, Chelsea, Chicopee, Concord, Danvers, Dennis, Everett, Fairhaven, Fall River, Gloucester, Hamilton, Harwich, Hingham, Holyoke, Hopkinton, Hudson, Lawrence, Lowell, Malden, Maynard, Medford, Melrose, Middleborough, Millbury, New Bedford, Newton, North Brookfield, Norton, Quincy, Reading, Revere, Rockport, Somerville, Southbridge, Springfield, Stoneham, Stoughton, Taunton, Wakefield, Waltham, Watertown, Webster, Wellesley, Weymouth, Woburn and Yarmouth.

SUMMARY OF ANALYSES.

ARTICLES EXAMINED.	Number found to be of Good Quality.	Number adulterated or varying from the Legal Standard.	Total.
Butter,	1	–	1
Cider,	3	1	4
Cocoa,	1	–	1
Coffee,	1	–	1
Condimental sauces,	2	–	2
Confectionery,	1	–	1
Cream,	6	–	6
Drugs,	67	23	90
Fish,	2	–	2
Flavoring extracts: —			
Almond,	1	–	1
Lemon,	2	1	3
Vanilla,	5	1	6
Jams and jellies,	2	–	2
Lard,	10	3	13
Meat products: —			
Bacon,	1	–	1
Hamburg steak,	2	–	2
Sausages,	28	10	38
Milk,	655	100	755
Mince meat,	3	–	3
Molasses,	6	–	6
Olive oil,	5	1	6
Pickles,	1	–	1
Salad dressing,	1	–	1
Scallops,	11	4	15
Soft drinks,	2	–	2
Vinegar,	17	13	30
Totals,	836	157	993

PROSECUTIONS FOR VIOLATIONS OF THE LAW RELATING TO FOOD AND DRUGS.

Twenty-three convictions were secured during the month of November, 1915, for the sale of adulterated food and drugs, and for violation of the slaughtering laws, as follows: —

NAME OF DEFENDANT.	Place.	Character of Article sold or Nature of Offence.
Daniel E. Cameron,	Dracut,	Milk (total solids, 10.46).[1, 2]
George H. Curley,	Chelsea,	Milk (total solids, 11.56).
John Duponte,	Reading,	Milk (total solids, 10.24).[1]
Morris Goldman,	Chelsea,	Milk (total solids, 11.34).[1]
George Klonkinota,	Hull,	Milk (total solids, 10.40).[3]
Stevens Stratus,	Hull,	Milk (total solids, 10.58).[3]
Samuel Hajjar,	Lawrence,	Lard (compound; not marked).
Joseph Silva,	Lawrence,	Lard (compound; not marked).
John Holt,	Lawrence,	Sausages (contained more than 2 per cent. starch).
Alfred Wigglesworth,	Holyoke,	Sausages (contained more than 2 per cent. starch).
Alton J. Baker,	Dennis Port,	Scallops (soaked).
Leander Cahoon,	South Yarmouth,	Scallops (soaked).
Daniel J. Morse,	Boston,	Scallops (soaked).
William C. Small,	West Chatham,	Scallops (soaked).
Nathaniel Tripp,	Dennis Port,	Scallops (soaked).
Arthur H. Eaton,	Waltham,	Spirit of peppermint (not U. S. P.).
Darwin D. Patterson,	Waltham,	Spirit of peppermint (not U. S. P.).
Harry Berwick,	Webster,	Selling uninspected and unstamped meat.
Albert F. Bickford,	Quincy,	Violation of rules and regulations of the State Department of Health.
Albert F. Bickford,	Quincy,	Violation of rules and regulations of the State Department of Health.
Fred O. Evans,	Quincy,	Slaughtering without inspector present.
Fred O. Evans,	Quincy,	Slaughtering without inspector present.
Abraham Green,	Middleborough,	Slaughtering without inspector present.

[1] Watered. [2] Appealed. [3] Skimmed.

Fines imposed, $397.60.

List of Adulterated or Improperly Labeled Foods, etc., for November, 1915.

Number of Sample.	Character of Sample.	Name of Manufacturer, Wholesaler or Producer.	Results of Analyses.
28571	Lemon extract,	Chas. H. Baldwin, West Stockbridge,	Low in lemon oil.
q 17082	Vanilla extract,	Bell Bros. Specialty Company, Boston,	Label false; a solution of artificial vanillin.
q 16851	Cider vinegar,	Walter H. Hildrick, New York,	Low in solids.
q 16853	Pure cider vinegar,	Livingston Company, Billerica,	Low in solids.
q 16885	Pure cider vinegar,	J. Eames & Sons, East Holliston,	Low in acid.
q 16886	Pure cider vinegar,	Livingston Company, Billerica,	Low in acid.
q 16913	Pure cider vinegar,	Bain Bros., Boston,	Low in acid.
28447	Compound vinegar,	National Wholesale Grocery Company, Fall River.	Per cent. of ingredients not stated on label.
q 17064	Cider vinegar,	Urquhart Bros., Boston,	Low in acid.
2881–T	Milk,	Augustus Castonguay, South Hampton, N. H.,	Total solids, 11.32 per cent.; fat, 3.30 per cent.; contained added water.
2883–T			Total solids, 11.58 per cent.; fat, 3.40 per cent; contained added water.
2739–T	Milk,	John Duponte, Reading,	Total solids, 10.78 per cent.; fat, 3.70 per cent.; contained added water.
2741–T			Total solids, 10.24 per cent.; fat, 3.10 per cent.; contained added water.
2743–T			Total solids, 10.38 per cent.; fat, 3.20 per cent.; contained added water.
2745–T			Total solids, 10.58 per cent.; fat, 3.30 per cent.; contained added water.
2747–T			Total solids, 10.46 per cent.; fat, 3.15 per cent.; contained added water.
2749–T			Total solids, 10.24 per cent.; fat, 3.20 per cent.; contained added water.

q 17032	Milk,	George Poyant, South Dartmouth,	Total solids, 11.36 per cent.; fat, 3.20 per cent.; contained added water.
q 17033			Total solids, 11.40 per cent.; fat, 3.40 per cent.; contained added water.
q 17034			Total solids, 11.40 per cent.; fat, 3.35 per cent.; contained added water.
q 17035			Total solids, 11.44 per cent.; fat, 3.50 per cent.; contained added water.
q 17036			Total solids, 11.64 per cent.; fat, 3.45 per cent.; contained added water.
q 17037			Total solids, 11.30 per cent.; fat, 3.30 per cent.; contained added water.
q 17038			Total solids, 11.44 per cent.; fat, 3.50 per cent.; contained added water.
q 17039			Total solids, 11.30 per cent.; fat, 3.60 per cent.; contained added water.
q 17040			Total solids, 11.70 per cent.; fat, 3.35 per cent.; contained added water.
q 17041			Total solids, 11.34 per cent.; fat, 3.80 per cent.; contained added water.
q 17042			Total solids, 11.70 per cent.; fat, 3.50 per cent.; contained added water.

COLD STORAGE OF FOOD.

Articles in Cold Storage condemned upon Physical Examination as Unfit for Food.

Date.	ARTICLES.	Weight (Pounds).	Reasons.	Disposition.
Nov. 6, 1915	Mackerel, .	132	Soiled and dried out, . .	Rendered.
Nov. 16, 1915	Geese, . .	324	Decomposed, . . .	Rendered.
Nov. 16, 1915	Roosters, .	180	Decomposed, . . .	Rendered.
Total, .	. . .	636		

SLAUGHTERING.

During the month of November, 1915, the following confiscation was made:—

Date.	ARTICLE.	Weight (Pounds).	Reason.	Disposition.
Nov. 22, 1915	Veal, . .	46	Uninspected and unstamped,	Buried.

MASSACHUSETTS STATE DEPARTMENT OF HEALTH.

Commissioner, Allan J. McLaughlin, M.D.,
Division of Administration.

Division of Sanitary Engineering, ...	Director and Chief Engineer, X. H. Goodnough, C.E.
Division of Communicable Diseases, . . .	Director, E. R. Kelley, M.D.
Division of Water and Sewage Laboratories, .	Director and Chemist, H. W. Clark.
Division of Antitoxin and Vaccine Laboratories,	Director and Pathologist, Milton J. Rosenau, M.D.
Division of Food and Drugs, ...	Director and Analyst, Hermann C. Lythgoe.
Division of Hygiene, ...	Director, Selskar M. Gunn.

Public Health Council.

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